For AmeriPride's "heart of the business" applications, HP delivers a perfect fit

"With our HP solution, including the StorageWorks XP24000 disk array, we are never backed into a corner. We don't need to re-architect all the time. We can add capacity on demand to respond to business needs."
– Joe Jansen, Director, Information Services, AmeriPride Services

Industry: Business services

Solution: HP StorageWorks disk array and storage management software for mission-critical applications

Objective:
High capacity, scalable, easily managed storage solution to support business process change

Approach:
Deploy HP StorageWorks disk array and software with flexible thin provisioning

Business technology improvements:
- Improved I/O performance 40 to 85 percent, cut backup times up to 50 percent
- Migrated more than 15 TB of data to new SAN without disrupting day-to-day operations
- Reduced risk of data loss and production interruptions with faster, more timely backups
- Fast, flexible storage supports complex conversion of mission critical applications

Business outcomes:
- More agile technology infrastructure enables fast, flexible IT response to business needs
- Slashed power/cooling/space needs and costs by centralizing route accounting application from 50 branches
- Better communication with customers and more accuracy/speed in processing change orders

Early every morning – all over North America – AmeriPride Services trucks pull out of some 50 branches, setting out on their routes to deliver clean uniforms, restaurant linens and floor mats to 150,000 businesses. Nobody is surprised when the AmeriPride driver shows up on time and with the right products; they do it like clockwork, just as they have for more than 100 years.

The AmeriPride driver on his or her weekly call is the face of the company to customers. But standing behind the drivers are the information systems that let them

> "XP24000 Thin Provisioning was a big selling point. Thin provisioning gives us flexibility in allocating storage resources. That was the thing that tickled the fancy of our storage administrators."
>
> – Joe Jansen, Director, Information Services, AmeriPride Services

arrive with a complete and accurate load, on time. AmeriPride matches its service to each customer's needs, and the result is the complex information system that every night generates the load lists the drivers pick up every morning before heading out to cover the dozens of stops on their routes before the day is over.

In a business driven by employment trends and economic swings, maintaining a competitive edge and profitability depends on efficient operations. "We are a quality supplier in a commodity business," says Joe Jansen, AmeriPride's Director of Information Services. "That demands great flexibility, and the key to flexibility is information."

Evaluating new storage solutions
At the end of 2007, AmeriPride's Hitachi storage system was coming to the end of its lease – and its life cycle. To support significant data growth and new applications, AmeriPride needed a state-of-the-art storage system with large capacity, easy scalability and efficient manageability.

"In evaluating new storage solutions," says Jansen, "capacity was an issue. But we were also looking for greater flexibility. The Hitachi tool set for moving data from disk to disk was clunky. As space got tighter, it became more difficult to move data. That was critical as we were making major changes in our most important business processes."

HP delivers flexibility and savings
AmeriPride's short list of vendors included Hitachi and EMC – plus HP, already a trusted supplier for servers. Working with HP partner Works Computing, AmeriPride chose the HP StorageWorks XP24000. "XP24000 Thin Provisioning was a big selling point,"

says Jansen. "Thin provisioning gives us flexibility in allocating storage resources. That was the thing that tickled the fancy of our storage administrators."

XP24000 tiered storage capability was another big factor. Jansen says, "We see the potential to save big by using cheaper disks for older or less critical data, providing cost appropriate data storage with a single point of management. That's key. We don't know exactly what we will need, but the ability to manage it with a single source is fantastic."

Big migration is a smooth trip
Just as important, HP and Works Computing showed AmeriPride a proof of concept for a simple migration path from their existing storage array to the HP XP24000 array, a path that would take them forward with low risk and without disrupting operations. HP Services provided technical support for the migration, using HP External Storage software to connect the Hitachi array to the XP24000 and seamlessly move the data to the new environment.

Recalls Jansen, "From the time we placed the order until the last bit was moved, we migrated more than 15 TB [terabytes] of data in just three months." AmeriPride accomplished this massive migration without interrupting day to day production. "For our mental health," says Jansen, "we executed the first system migration over a weekend. But after that first weekend, we knew it works as advertised. Normally, you have to schedule a SAN migration far in advance, to get users off the system for a whole weekend. We did not have to kick the users off the system, and we did not have to work nights and weekends."

Delivery-route tracking is mission critical
At the same time, AmeriPride began implementation of a new route accounting system from ABS Laundry Business Solutions. The company uses this system for service management, customer billing management, tracking thousands of delivery routes and production planning. It is the heart of their business. Previously, route accounting was distributed across 50 branch offices in the United States and Canada. The company is consolidating this function to its headquarters.

"All route accounting data is stored on the XP24000 SAN. With the XP24000, we can move data flexibly and allocate storage easily," Jansen explains. His team staggers the branch conversions so they are not competing for the same resources. "The XP24000 gives us the extreme flexibility and speed, plus capacity, to juggle all those pieces, to be able to create and constantly refresh these environments as

we do the conversions. With XP24000 storage, we are never backed into a corner. We don't need to re-architect all the time. We can add capacity on demand to respond to business needs."

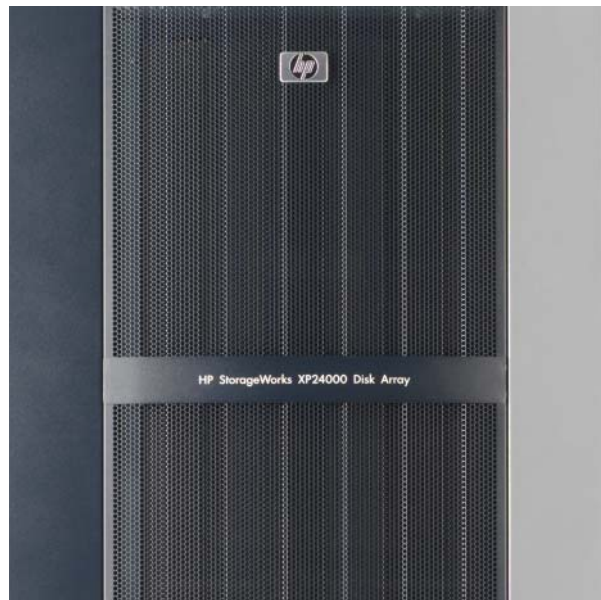### Uniformly faster processing yields higher efficiency

Jansen sees clear performance improvements with XP24000 storage: "In our enterprise data warehouse application, I/O performance has improved 40 percent. For Oracle® E-Business Suite, I/O performance improved 85 percent. For route accounting, I/O performance improved 50 percent. Oracle backup went from 18 hours to 9 hours. We basically cut everything in half."

Higher performance also means reduced risk. Jansen notes: "Before, we were in much greater risk of missing our daily pickup of backup tapes, which created risk of data loss. And if an overnight backup ran into the production day, it slowed down production. The raw speed of the XP24000 SAN eliminates those risks."

AmeriPride uses a combination of HP Data Protector Software and Oracle Storage Manager software for disk-to-disk-to-tape backups. Disk-to-disk backups enable faster backups and faster restores, and then backing up to HP tape libraries allows them to send the HP tape cartridges off-site for disaster recovery.

BladeSystem and XP24000 work together for a flexible solution

The AmeriPride data center has five c7000 HP BladeSystem enclosures, with 40+ HP ProLiant server blades. All their enterprise applications run on the blades, most on Red Hat Linux, with some departmental applications running on Microsoft® Windows®. HP Systems Insight Manager provides centralized management for all servers.

The combination of XP24000 storage and HP ProLiant blades gives AmeriPride the flexibility they need. "The XP24000 supports all the leading operating systems, and HP server blades offer interoperability between Linux and Windows," says Jansen. "We can easily pull out a blade and reconfigure it for either operating system. When we went to the new route-accounting system it was an easy decision to stick with the flexible HP blade architecture."

New infrastructure is the route to mobility computing and communications

With infrastructure consolidation, AmeriPride is able – for the first time – to equip route drivers with hand-held computers, eliminating a huge amount of hand-written paperwork, data entry errors, and delay. Before, if a customer asked a driver for a change order (for example, swap the 3x5 mat by the back door to a 4x6 mat), the driver had to write up the change by hand. Now the driver enters the change on the hand-held, in front of the customer, and gets a sign-off.

At the end of the day drivers upload changes from their handhelds into the system. Instead of manual keying in the next day, the changes are in the system and start processing immediately. "That saves a half a day turnaround; we're half a day ahead right from the start." says Jansen. "Manual key-in also means errors, and errors cost time and money. And it avoids misunderstandings with the customer, because there is a sign-off on the change order."

Bottom line benefits are increased driver efficiency and better customer service. New orders are placed, implemented, delivered and billed faster. The most important benefit is faster, more responsive customer service. "Service is essential for our reputation as the quality supplier," says Jansen, "and having the right information is the key to great service."

Consolidation nets green benefit

When AmeriPride decided to centralize its route-accounting system, it also consolidated its data center. "With the old distributed route-accounting system," says Jansen, "we had 50 servers and backup systems in the branch offices. Now, we have compressed that into a dozen HP server blades in the data center."
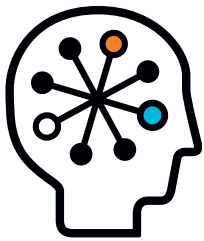
While they had to add some cooling and power capacity to support the data center renovation, the net savings – after space, power and cooling cuts in 50 branches – far exceed the additions. "This is a tremendous green story," says Jansen. "The data center now uses one third less space, while providing two or three times as much computing power."

About AmeriPride Services, Inc.

AmeriPride Services (www.ameripride.com) is one of the largest uniform rental and linen supply companies in North America. The company operates 150 production facilities and service centers throughout the United States and Canada and serves 150,000+ customers every week. Privately owned and actively managed by the founding family for more than 100 years, AmeriPride supplies local, regional and national companies in automotive, manufacturing, service, hospitality, food processing, technology, and research and pharmaceutical/laboratory industries.

About Works Computing

Established in 1994, Works Computing (www.workscomputing.com) is an HP Enterprise Value Added Reseller dedicated to helping customers identify and implement IS products and services to help meet their business needs. The company has its headquarters in Bloomington, Minnesota, and is among the largest HP Enterprise VARs in the Midwest region.

Technology for better business outcomes

For more information, go to www.hp.com/go/storage/xparrays and www.hp.com/go/storageworks/software

For more HP StorageWorks customer stories, go to www.hp.com/go/storage/casestudies

WORKS
COMPUTING ▼ INC

hp