

**Hawkins services thousands of customers** who depend on the company's highly reliable supply chain for the uninterrupted delivery of chemicals. The company's IT infrastructure is integral to delivering these services, and is critical to improving sales and operational efficiency. Performance problems with its storage system created an unstable environment that interfered with the availability of key applications and reports. With the installation of FlashArrays from Pure Storage, performance problems have been eliminated, managers now receive key reports ahead of schedule, and the IT staff is freed up to concentrate on important new projects instead of allocating important resources to storage system administration.

**BUSINESS TRANSFORMATION**

Company executives, managers and drivers now have quick, reliable access to the sales, supply-chain and route information and applications that make them more productive. In parallel, the IT staff no longer wastes valuable time trying to make an imperfect storage system perform reliably.

**GEO**

North America

**INDUSTRY**

Manufacturing

**"When I can work on new development initiatives and add new features, instead of constantly tuning jobs and worrying how long they're going to run, that's a big benefit."**

- Bruce Lester, *developer*

**HAWKINS INC. FINDS WINNING FORMULA FROM PURE STORAGE FOR SOLVING APPLICATION PERFORMANCE PROBLEMS**

Hawkins Inc. is a formulator, manufacturer and distributor of thousands of industrial chemicals sold to municipalities and businesses throughout the Central United States. Thousands of water-treatment facilities, manufacturers, food and dairy producers, research labs and other organizations depend on Hawkins for essential chemical products.

IT plays a vital role in ensuring the company maintains an optimal supply chain for its customers. Drivers are freed from tedious and inefficient paperwork by using handheld devices; delivery routes are calculated for maximum efficiency; and data warehouses are used for a variety of business-intelligence applications, including decisions on where to expand and how to increase competitive advantage.

Hawkins' core application is its JD Edwards enterprise resource-planning (ERP) suite, running on Microsoft SQL Server. The company has virtualized its desktop environment with VMware, and maintains a number of data warehouses.

In this data-driven environment, "storage is everything," according to Dennis Tobias, senior network systems engineer at Hawkins, based in Roseville, Minnesota. "We have to have reliable access to all our data whenever it's needed."

**FAILED STORAGE SYSTEMS HINDER KEY BUSINESS PROCESSES**

Beginning a few years ago, that requirement was proving increasingly difficult to meet because of problems with back-end storage systems. Hawkins initially moved its core applications and data to a hybrid storage system "that didn't give us the performance we needed," Tobias says, so the company brought in another hybrid system "that was supposed to be the latest and greatest, but it ended up falling flat on its face."

Bruce Lester, the company's SQL and data warehouse developer, remembers the pain caused by the hybrid storage system.

"One day, all of my database jobs would be done by 6 a.m. The next day, they would be running until 8:30 a.m., and I would have no idea why. And then two days later, it would be back to 6:00 a.m. So, I became very concerned about putting up jobs. I couldn't predict what the storage system was going to do from day to day."

This inconsistency in database performance had a direct impact on key operational processes at the company. "Our executives and sales managers expect a sales report first thing every workday; and our drivers set off early, so they need to know their routes," Lester notes. "So, if our overnight runs aren't completed on time, it affects critical processes throughout the company."

**COMPANY:**

Hawkins Inc.  
[www.hawkinsinc.com](http://www.hawkinsinc.com)

**USE CASE:**

- Database – MSFT SQL, JD Edwards

**CHALLENGES:**

- Inconsistent performance of storage system interferes with key business processes like sales forecasting and supply-chain management
- Caretaking of storage systems diverts attention from important IT initiatives

**IT TRANSFORMATION:**

- Daily sales summary ready in 3 hours instead of 8 hours
- Database backup time cut 91%, from 12 hours to 1 hour
- IT staff liberated to pursue strategic new projects

**“I’ve been in the industry for 15 years and Pure Storage is the only storage company that delivers on all of its promises.”**

– Dennis Tobias,  
*senior network systems engineer*

**POOR ARCHITECTURE CAUSES PERFORMANCE PROBLEMS**

A major contributor to the inconsistency of the storage system was the way it was originally architected, Tobias says. “They put all of our virtual infrastructure and all of our production data on the same resource pool, so whenever we were updating our Windows environment, our entire VMware production environment would light up red with latency warnings. We were getting hundreds of milliseconds of latency, so everything would come to a crawl. Re-architecting the system helped, but we were still overrunning the disk.”

The continuing problems led the IT team to seek alternatives. “We looked at all the major players after crossing off any hybrid vendor,” Tobias says. In the end, the choice was Pure Storage – a decision the team hasn’t regretted for a second.

“It has been a fantastic product; extremely reliable,” Lester says. “I can throw work at it, even parallel jobs, and it has no problem keeping up. With Pure, my job is finished within minutes of the processes being completed. It’s so reliable and dependable. Instead of constantly tuning and moving stuff around to get processes to finish on time, I’m now able to concentrate on new projects. So, it’s a fantastic benefit to me.”

**KEY REPORTS DELIVERED AHEAD OF TIME**

The primary sales report, which is run overnight before each workday, used to take 8 hours to complete, Lester says, but with Pure it now takes only 3 hours, a reduction of more than 60%. “So now we can promise our employees that they are able to start their day the second arrive at the office.”

Overnight backups of key databases also are being completed much faster with Pure. “Our backup windows have shrunk to almost nothing,” Tobias observes, “especially on our Exchange servers, where the window used to be 12 hours; now it’s been collapsed to just one hour.”

Reflecting on the dramatic performance improvements afforded by Pure flash arrays, Tobias recalls “the other day, I was watching while Bruce did backups from his SQL Servers, and it was pulling 19 Gbs of network bandwidth while moving the data. I’ve never seen that kind of utilization in my life.”

**LIFE IN THE IT DEPARTMENT MUCH IMPROVED**

Installing Pure Storage has had a dramatic impact on how Hawkins allocates its precious IT resources.

“With Pure, you just set it and forget it,” Lester says. “I don’t have to worry about block sizes on my VMs or anything. And the de-dupe and compression features are great. It’s a fantastic product.” Adds Lester, “When I can work on new development initiatives and add new features, instead of constantly tuning jobs and worrying how long they’re going to run, that’s a big benefit.”

The Hawkins team also praises the “awesome” support from Pure Storage. “We faced a real crisis when our hybrid storage system was failing us and we needed to move our loads onto something else,” Tobias recalls. “The very next day after we called, two employees from Pure Storage brought out a FlashArray in the middle of the day, took the controller off-line, popped in the cards and rebooted it. Didn’t miss a beat. I mean, who does that?!”

In praising Pure Storage, Tobias brings the concept of set it and forget it to a new level. “The first three months after I joined Hawkins, I spent all my time babysitting the hybrid storage system, watching for performance bottlenecks, trying to figure out what was going wrong. Once we implemented Pure, I literally forgot the log-in password for the system because I hadn’t needed to look at it for months. That’s how well it is working.”

