



Objective

Support rapid business growth with more scalable, cost-effective infrastructure for mission-critical Microsoft SQL Server database

Approach

Modernize entire Microsoft environment with HPE Superdome X Servers, HPE 3PAR StoreServ Storage, and HPE Proactive Care Advanced Service

IT Matters

- Optimized CPU utilization to improve SQL Server performance and efficiently handle business growth
- Accelerated inventory accounting process from 24 – 36 hours to 8 hours
- Increased the number of batch requests per second, speeding query requests and reporting

Business Matters

- Enabled business to double in size on existing infrastructure
- Assured timely order fulfillment to meet customer expectations
- Increased workplace productivity by enabling employees to perform their jobs faster

W.B. Mason transforms its SQL Server-driven business with HPE Superdome X

Office products leader boosts workplace productivity, unleashes business growth



Delivering legendary, personalized customer service

The company's slogan, "Who But W.B. Mason," is apt. Who else delivers the kind of personalized service and customized solutions to meet any imaginable office products need an organization might have? There's only one answer: W.B. Mason.

Founded by William Betts Mason in 1898, the company has grown to become the largest privately owned office products dealer in the United States. The key to this long history of success is a passion for delivering outstanding service and value. Customers get an assigned sales person, an assigned customer service rep, even an assigned driver who personally brings each order into the customer's facility.

“HPE has beat all expectations of what we were looking to gain from Superdome X and 3PAR.”

— Mike Yarosh, Director of IT Services, W.B. Mason

To make sure its 750 trucks roll out every morning with precisely the right orders, W.B. Mason relies on a large Microsoft® SQL Server database running Microsoft Dynamics AX enterprise resource planning (ERP). Every order, whether coming in through the web or personally keyed in by sales reps, goes through SQL Server. In fact, everything needed to run the business—inventory, supply chain, shipping, invoicing, financial reporting, etc.—is managed in SQL Server. To say it’s critical is an understatement.

Mike Yarosh, director of IT services at W.B. Mason, remarks, “Any hiccup, any slow-down in SQL Server and everyone feels it. If orders aren’t processed on time, our drivers don’t have anything to deliver. No one is happy. Our job in IT is to never let that happen.”

To that end, W.B. Mason has long relied on Hewlett Packard Enterprise (HPE) servers and storage to run SQL Server. However, as the company was growing 10 – 12% each year, its traditional blade infrastructure struggled to keep up. The company was purchasing new servers nearly every year, each time requiring a long, labor-intensive migration. Yet, despite its most recent upgrade, CPUs were

consistently running at a dangerously high 95% utilization rate. Without taking fast action, IT risked running out of compute power before year-end—just prior to the company’s busiest period in January.

Modernized infrastructure for mission-critical SQL Server

Working with HPE, W.B. Mason embarked on a dramatic infrastructure transformation to enable IT to support its business growth. To do this, the company required greater scalability with increased performance and high availability for its critical SQL Server environment. W.B. Mason chose HPE Superdome X running Microsoft Windows® as the core platform for SQL Server and Dynamics AX. The Superdome X is loaded with four Superdome BL920s Gen9 server blades configured as two electronically isolated partitions, called nPars. No other major x86 vendor offers this type of electronic isolation, which enables W.B. Mason to achieve extraordinarily high reliability by linking the two nPars with SQL Server clustering.

“Our focus is on having as much redundancy as possible,” says Yarosh. “With a single instance of SQL Server that’s constantly growing, we have to make sure it’s available all the time. The Superdome chassis is tried and true, and clustered nPars provide the added assurance of high availability we need. We know if anything happens like a component failure or OS problem, we can keep the business up and running on Superdome X.”

W.B. Mason also deployed HPE 3PAR StoreServ Storage with all-flash drives to further enhance performance and scalability while gaining six-nines data availability. The HPE infrastructure is protected by HPE Proactive Care Advanced Service that provides W.B. Mason with an assigned HPE Account Support Manager (ASM) for personalized technical and operational advice to prevent problems and quickly resolve issues should they occur. This allows the company to focus on running the business and serving customers rather than maintaining technology infrastructure.

Achieves a whole new level of scalability

With Superdome X, W.B. Mason now has a platform for SQL Server that will scale at pace with the business—and then some. Today, the company has optimal CPU utilization to handle business growth for the foreseeable future. And when the time comes for further expansion, the company can simply plug in additional capacity to its existing Superdome X chassis.

Mike Hewins, database administrator with W.B. Mason, notes, “With the Superdome X configuration we currently have, we could easily double the size of our business. If we start to hit a wall, all we have to do is add a couple more server blades to the chassis and we can double again. There’s no need to go through a major platform migration every time we grow. The Superdome X is actually scalable, which our previous environment was not.”

Performance boost enables greater workplace productivity

Performance has also improved since W.B. Mason modernized its SQL Server infrastructure with Superdome X. As a result, key business processes complete faster, enabling the entire workplace to be more productive.

Hewins provides a prime example: “Every weekend there’s a scheduled process that recalculates our inventory. Before, that process took 24 – 36 hours. Now it’s finishing in under eight hours. That’s a three to four times improvement that has a huge impact on order fulfillment and making sure our trucks get out the door on time Monday morning.”

Yarosh points out that one of the most important measures is simply how employees feel about the way applications perform. For example, IT conducted a user experience survey before moving to Superdome X, and across the board people responded that their applications were slow. After the migration, users were asked again without being told the infrastructure had changed, and the universal response was that everything ran faster.

Customer at a glance

Application

- Microsoft SQL Server running mission-critical Microsoft Dynamics AX enterprise resource planning system driving all critical business processes from order processing to shipping

Hardware

- HPE Integrity Superdome X
- HPE 3PAR StoreServ Storage

Software

- Microsoft Windows Server 2012 R2
- Microsoft SQL Server 2012
- Microsoft Dynamics AX 2009

Services

- HPE Proactive Care Advanced Service

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“User experience is hard to quantify, but it’s something that upper management looks at very closely,” he says. “Regardless of whether a purchase order is generated in one second or three seconds, what management cares most about is that the purchasing agents can do their jobs faster. That’s a big deal because it means higher productivity, which helps improve our bottom line.”

Hewins adds that HPE 3PAR storage also contributes to increased performance: “We see 30,000 – 40,000 batch requests per second hitting the 3PAR, which is a great improvement over our previous storage.”

Enabling business growth with no IT limitations

By modernizing its SQL Server environment with HPE Superdome X and 3PAR, W.B. Mason has demonstrated the dramatic impact IT has on a business. Simply put, when IT performs better, employees can be more

productive, business processes run faster, and delivery trucks head out to customers on time. Most important, with Superdome X and 3PAR, W.B. Mason can continue to grow its business knowing IT will be able to support this growth with no limitations.

Yarosh concludes, “So often in IT we are playing catch-up with the business. This solution from HPE has turned that scenario around. It’s absolutely fantastic to now be able to go to the business and say we have a solution that will last many, many years, and provide the ability to grow even beyond what you’re currently planning. HPE has beat all expectations of what we were looking to gain from Superdome X and 3PAR. We’re very excited about what it holds for the future of W.B. Mason.”

Learn more at
hpe.com/info/superdomex



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