

CASE STUDY



Quaker Maid Meats Achieves "Scorching Fast" Database Speeds on Virtualized System

US meat processing company increases system performance 40x using ioTurbine™ software.

The Challenge

Quaker Maid Meats is a Pennsylvania-based company that produces several meat products, including Steak-Umm, Philly Gourmet, and Mama Lucia Meatballs, with over 100 employees in three locations.

Jesse Pryor, Systems Engineer for Quaker Maid, described the challenge Quaker Maid's system faced: "Our virtualized Microsoft Dynamics NAV was stalled by bottlenecks in the SQL server backend. The resource consumption caused delays everywhere else and became a real problem for us."

Jesse needed a solution that could provide the following benefits:

- Improve productivity and user experience by accelerating SQL server response times
- 2. Leverage current hardware investment without sacrificing performance
- 3. Increase the reliability of its mission critical and business critical applications

The Solution

Back in 2010, Jesse had seen a demonstration of ioTurbine™ products at VMWorld that convinced him SanDisk could resolve Quaker Maid's system performance problems. Jesse explains, "The incredible performance of ioTurbine products demonstrated at VMWorld was certainly memorable. When we needed better system performance, we turned to ioTurbine; it exceeded our expectations." Jesse and his team configured two ESXi servers hosting redundant SQL server instances and Microsoft Dynamics NAV ERP, and four Citrix XenApp servers to use ioTurbine software.

Blazing Fast Reporting Eliminates Employee Wait Time

Jesse's team found that Microsoft Dynamics reporting greatly benefited from faster caching. "Most of our issues were caused by a high number of deadlocks and blocks in the databases, stalling our reporting process and frustrating employees who needed the information. ioTurbine software has virtually eliminated any wait time for reports."

Solution Focus

- Microsoft Dynamics
- VMware vSphere
- · Microsoft SQL Server
- Citrix XenApp

Summary of Benefits

- 40x faster report generation
- 10-15 employee hours recovered per day
- Easily fits into existing infrastructure
- Equals physical workstation performance
- Extends life of existing hardware





"The ioTurbine solution needs to be seen to be believed. It is a great way to cost-effectively increase your current system's performance without replacing your hardware."

Jesse Pryor, Systems Engineer, Quaker Maid Meats

Increasing Productivity to Help the Bottom Line

The faster report generation benefited both end users and the IT staff by improving productivity and user experience. Jesse commented, "We are saving 10–15 manhours per day by cutting wait time. I estimate we are saving the company around \$52,000 yearly through increased employee productivity. The better user experience also means happier employees."

Leveraging Current Hardware for Future Savings

ioTurbine software delivered a high ROI by allowing Quaker Maid to extend the useful life of its current storage. Jesse comments, "The ioTurbine solution cost-effectively increases system performance without the need to add a lot of hardware. ioTurbine has allowed us to delay the purchase of new storage capacity by at least a year."

Easy Deployment

Upgrading storage in virtualized environments typically requires complicated hardware setup to get the necessary performance results, but the ioTurbine solution drops into the existing infrastructure and offers immediate performance increases. Jesse comments on the ease of implementation: "All you have to do to make the SanDisk solution work is install High IOPS adapters and configure the ioTurbine software. This takes much less time than adding more servers or storage arrays to the infrastructure."

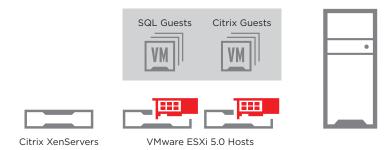
SanDisk Powered XenApp

In addition to its SQL server databases, Quaker Maid also cached its Citrix XenApp application with very positive results. Jesse noted how the ioTurbine cache accelerated their Citrix XenApp environment, "ioTurbine takes a virtual environment and enables the end user to feel like they are working on a full-fledged workstation with all of the performance benefits you would expect."

SanDisk Powered Software Stack

Quaker Maid Staff Microsoft Dynamics NAV VMware ESXi 5.0 Microsoft SQL Server Citrix XenApp Windows Server 2003-2008 R2 VSL High IOPS adapter

System Overview



Virtualized System

- 2 x x3550 servers, 2 x 6-core Intel Xeon x5680 processors @ 3.33GHz, 144GB RAM
- Application: Microsoft Dynamics NAV
- OS: VMware ESXi 5.0
- ioTurbine[™] software
- · High IOPS 600GB adapter

Citrix XenServer servers

 2 x x3550 servers, 2 x 6-core Intel Xeon x5680processors @ 3.33GHz, 72GB RAM

Storage (14U)

• EMC AX4-5i SAN



"It's one thing to look at performance specifications, but until you sit down and actually get a chance to experience the difference, the numbers are difficult to comprehend. The High IOPS adapters are 'scorching fast."

Jesse Pryor, Systems Engineer, Quaker Maid Meats



High IOPS adapter

Contact Information

sales-lenovo@sandisk.com

Western Digital Technologies, Inc.

951 SanDisk Drive Milpitas, CA 95035-7933, USA T: 1-866-744-2165

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At SanDisk, we're expanding the possibilities of data storage. For more than 25 years, SanDisk's ideas have helped transform the industry, delivering next generation storage solutions for consumers and businesses around the globe.

Summary

With faster caching, Quaker Maid Meats realized the following benefits after implementing ioTurbine software from SanDisk:

- 40x faster report generation
- 10-15 employee hours recovered per day
- Easily fits into existing infrastructure
- Equals physical workstation performance
- Extends life of existing hardware

Jesse and his team are excited about the results they achieved using SanDisk products: "SanDisk's track record of performance, as well as their dedicated software for management, easily sold us over competing products. Their solution is unique and considerably more robust than any other product we evaluated."

About Quaker Maid Meats

Established in 1960, Quaker Maid Meats is a family-operated business with an unswerving dedication to quality, value and service. The company's goal remains simple: to provide superior portion-controlled frozen meat products, manufactured with the best natural ingredients available, delivered to customers at a fair and reasonable price. Quaker Maid continually implements the newest technologies available to produce the highest quality products and enhance the plants' safety and sanitary environment.

The performance results discussed herein are based on internal Quaker Maid testing and use of Fusion ioMemory products and ioTurbine software Results and performance may vary according to configurations and systems, including drive capacity, system architecture and applications.

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