QuestPoint

From Hours to Seconds: QuestPoint Accelerates Time to Business Intelligence with Fusion ioMemory™

Solution Focus

- Web Analytics
- Microsoft SQL Server

"The ioDrive products have a direct bottom-line impact on our business. They allow us to collect and process greater amounts of data faster, which means less wait time for the user and happy customers."

"OLTP database performance increased from about 20,000 transactions/second (TPS) to over 80,000 TPS."

"We went from having a user panel of millions to a user panel of tens of millions, while improving the overall experience for our customers."

**Reuben Shaffer,
Chief Information Officer, QuestPoint**

The SanDisk® Solution

Moved mission-critical OLTP and OLAP databases off the SAN and onto Fusion ioMemory™ ioDrive® products in the database servers. This eliminated I/O delays in the transactional databases and accelerated reporting times in its data warehouse.

4x faster transactions per second

Report times reduced from hours to seconds

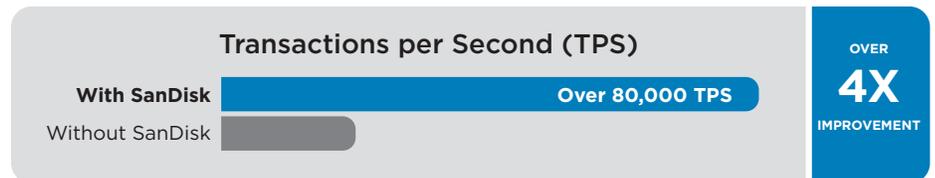Supports **10x** more user panels and processes more data with the same footprint

Fully utilizes performance potential of differentiated BI application
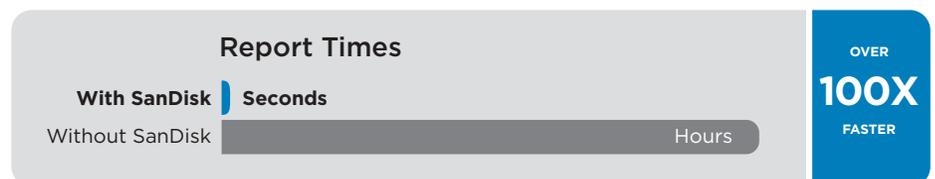
24-36x faster failover times

The Bottom Line

With the SanDisk solution, QuestPoint was able to speed data collection and processing to improve business intelligence, getting customers faster results than competing services.
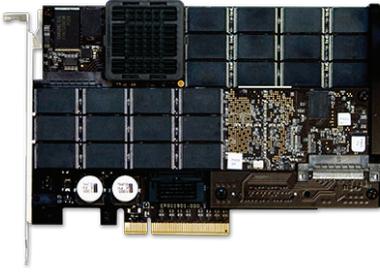
- Enhance value of BI services by giving customers faster, more actionable intelligence
- Performance headroom to defer SAN performance upgrade indefinitely
- Maintain same physical footprint to keep hardware, maintenance, and power and cooling costs in check
- Improve HA by speeding failover times

Transactions per Second (TPS)

| With SanDisk | Over 80,000 TPS |
| Without SanDisk | |

OVER **4X** IMPROVEMENT

"Business Intelligence (BI) queries that involve billions of records that used to take hours to run now take seconds."
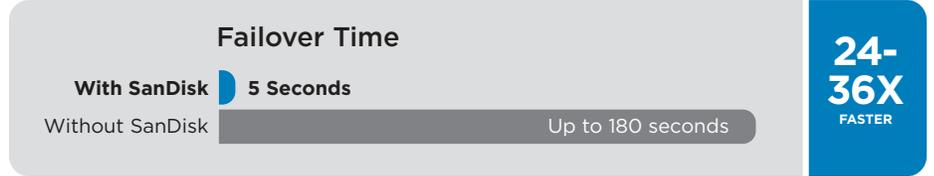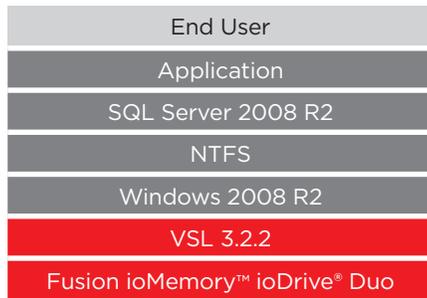Reuben Shaffer, Chief Information Officer, QuestPoint

Report Times

| With SanDisk | Seconds |
| Without SanDisk | Hours |

OVER **100X** FASTER

SanDisk®
a Western Digital brand

Fusion ioMemory™ - ioDrive® Duo

Failover Time

With SanDisk ▶ **5 Seconds**

Without SanDisk — Up to 180 seconds

24-36X FASTER

System Overview

System Before	System After

OLAP Server

SAN — 10 OLTP Servers

1 x ioDrive Duo 1.28TB device per Server

7 x ioDrive Duo 1.28TB devices

10 OLTP Servers — OLAP Server

OLTP Database Servers

- 10 x 2U servers, Intel E7-8837 Quad Socket processor @2.67Ghz, 96GB RAM
- OS: Windows 2008 R2
- Applications: Microsoft SQL Server 2008 R2
- Hard disks: 8 x 15K RPM SAS drives, 600GB per server

Data Warehouse System

- 1 x 4U server, Intel E7-8837 Quad Socket processor @2.67Ghz, 1TB RAM

Storage

- iSCSI SAN

- Moved active data from SAN to one ioDrive Duo 1.28TB device in OLTP Servers
- Moved active data from SAN to seven ioDrive Duo 1.28TB devices in OLAP server
- Use SAN for backup/archive only

SanDisk Powered Software Stack

End User
Application
SQL Server 2008 R2
NTFS
Windows 2008 R2
VSL 3.2.2
Fusion ioMemory™ ioDrive® Duo

Contact information

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Western Digital Technologies, Inc. is the seller of record and licensee in the Americas of SanDisk® products.

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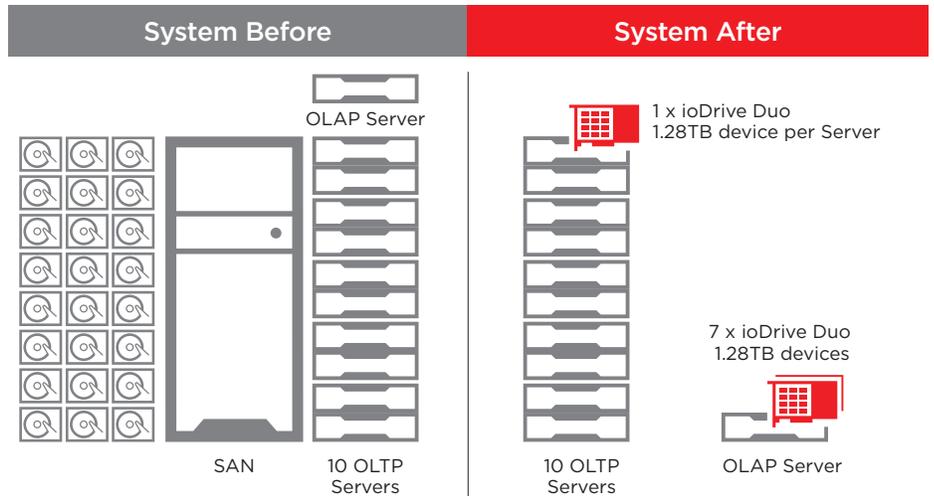Shanghai, 20031, P.R. China
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For more information, please visit:
www.sandisk.com/enterprise

SanDisk®
a Western Digital brand

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.

About QuestPoint

QuestPoint is a global digital marketing and intelligence company. Since 2008, QuestPoint's been developing the world's largest panel of online consumer behavior data. Its team of genius data scientists, brilliant marketers, and amazing engineers takes the data that is important to you, simplifies it, and provides you with the information you need to make the best marketing and business decisions possible.

It also uses this data to provide marketing services that generate high quality traffic, leads and customers for online marketers.