

Solution Focus

- Retail
- MS SQL Server

"Before High IOPS adapters, our site crashed every time we had a big promotion. After we installed High IOPS adapters, our site experienced its highest traffic ever without a hitch."

"Migrating our SQL Server databases to High IOPS adapters removed the disk bottleneck.
The whole system is now more stable and nimble. Even the biggest promotion in JD.com history had no issues."

Technical Principal, JD.com

The SanDisk® Solution

Eliminated site slowness and unresponsive servers by moving data off directattached storage shelves onto High IOPS adapters in mission-critical OLTP database servers.

Lenovo

Improvements Achieved

27x performance density **3x** footprint reduction

9x faster queries 10x IOPS

3:1 server consolidation

The Bottom Line

Higher performance with far less infrastructure:

- Eliminated lost sales from site outages and slow response times
- Footprint consolidation and increased server workload delivers ROI from savings on:
 - Software licenses
 - Storage upgrades
 - · Monitoring and maintenance
 - Floor space
 - Power and cooling
- Deferred expensive planned SAN upgrade

3:1 OLTP Database Server Consolidation

Subscriber Servers Before

Direct-attached Storage

Subscriber Servers After

Direct-attached Storage

Subscriber Databases

Direct-attached Storage



SanDisk Powered Software Stack

Retail Customer

Custom Web Services

Microsoft SQL Server

NTFS

Microsoft Windows Server

VSI

High IOPS Adapter



High IOPS Adapter

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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.

Subscriber Footprint Before



Subscriber Footprint After

Database Servers

- Hundreds of 4U primary database servers
- 2U direct-attached storage array on each server
- Consolidated x3850 X5 database servers 3:1
- Stored all business data on High IOPS Adapters
- Eliminated DAS arrays

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

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