

Marcus Food Co. Boosts Windows Performance & Efficiency While Extending Hardware Lifecycle by Deploying DymaxIO

A DYMAXIO CASE STUDY

CHALLENGES

- User complaints related to slow performance
- Productivity issues related to slow running applications
- · Hardware refresh costs

RESULTS SNAPSHOT



2.9 BILLION

I/Os REDIRECTED FROM STORAGE



44 DAYS

STORAGE I/O TIME SAVED



7-10 to YEAR

LIFECYCLE SAVED MONEY

ENVIRONMENT

- Key applications SQL Server, Exchange, Office, Remote Desktop Services
- Servers Dell PowerEdge R630
- VM Operating System Windows Server 2022, 2019, 2016
- Hypervisor Hyper-V Server 2019
- Storage Dell PowerVault with all SSDs
- Network Ubiquity, 10 Gigabit Ethernet

AT A GLANCE



Marcus Food Co. has built an efficient IT infrastructure, optimizing their virtual environment with DymaxIO® to boost performance, cut costs, and enhance user productivity and satisfaction.

THE CUSTOMER



For over 40 years, Marcus Food Company has provided top-tier technology, marketing, and financial services to protein sales teams. Starting in Wichita, Kansas, they have expanded to more than 20 offices across the U.S., Canada, and South America, all while driving more efficient and more profitable field-to-table transactions.

THE CHALLENGES



At Marcus Food Co., efficiency is key to financial success, especially as a financial intermediary for protein sales teams. IT Manager, Gary Ketchum, explains, "We manage significant financial transactions and depend on seamless operations—downtime is simply not an option."

Ketchum explains their strategy: "We use slightly older equipment supplemented with new drives. Extending the productive lifespan of our hardware is vital, as frequent hardware upgrades aren't feasible within our budget." This approach keeps their IT infrastructure robust and cost-effective.

They needed a solution to boost performance, improve efficiency, and extend hardware lifespan to meet the company's financial goals.



A DYMAXIO CASE STUDY

DYMAXIO BENEFITS

- Faster performance for Windows Servers, desktops, and laptops
- Better application performance
- Fast SQL and database performance
- · Fast data transfer rates
- Increased throughput and reduced latency
- Fast file reads and writes
- Optimal performance from your storage, HDDs and SSDs
- More reliable Windows Servers, desktops, and laptops
- Reduced timeouts, crashes, freezes, hangs
- Reduced file corruption and data loss
- Reduced "phantom" IT issues
- Reduced user support calls
- Extended hardware lifecycle
- · Increased VM Density
- Faster backups allowing backups to complete in named window's timeframe
- Reduced network traffic, increasing your network bandwidth for other work
- Reduced cloud compute costs
- Overall increased system and network-wide efficiency due to increased performance, reliability, longevity, and energy conservation
- True "Set It and Forget It"® management
- Compatible with all SAN/NAS and hyperconverged systems
- Deploys to hundreds or thousands of servers with just a few clicks – no reboot required
- "Time saved" reporting dashboard to validate benefits
- Enterprise-wide visibility into I/O performance health from the operating system to storage

THE SOLUTION



The IT team discovered DymaxIO, a 'set and forget' software that runs quietly in the background. It automatically offloads I/O from underlying storage and streamlines the remaining I/O traffic. All with near-zero CPU overhead.

DymaxIO enhances performance by first consolidating small, fragmented reads and writes into larger, sequential and more efficient I/O operations. It then uses an advanced tier-zero readonly cache, leveraging idle DRAM to fulfill read requests. This intelligent read-only cache only utilizes available memory, requiring no dedicated resources. Many users report serving up to 50% of their read traffic with just 2GB of available memory. DymaxIO reduces the load on storage and frees up I/O bandwidth by handling read I/O server-side at ultra-fast memory-to-memory speeds. As a result, most customers see at least 50% faster system performance, typically double.

THE RESULTS



After implementing DymaxIO across all their Windows servers, Marcus Food Co. saw faster application responsiveness and extended hardware lifecycles, creating a more efficient IT infrastructure.

Marcus Food Co.'s environment includes 22 virtual servers across 4 Dell PowerEdge Hyper-V Hosts, with Dell PowerVault SSD storage. Over the past 90 days, they achieved a remarkable reduction of over 2.9 billion I/Os redirected from storage, cutting Read I/Os by 76% and Write I/Os by 44%. This decrease cumulatively saved over 44 days of storage I/O processing time, significantly boosting performance and efficiency.





A DYMAXIO CASE STUDY

DYMAXIO FEATURES

- IntelliWrite® enhances system
 performance by automatically
 preventing split I/Os at the source, in
 the logical disk layer inside the
 Windows OS before being written to
 disk. It replaces hard-to-process
 random I/O, with sequential I/O,
 eliminating the I/O Blender effect.
- IntelliMemory® utilizes intelligent caching algorithms to create a readonly cache, using only the idle, available free memory on the server.
- "Time Saved" Benefits Dashboard shows ongoing benefit of the software by displaying the amount of I/O offloaded from storage and the corresponding time saved.
- Set-It-and-Forget-It® feature ensures that DymaxIO is nondisruptive, operating seamlessly in the background, and optimizing I/O generated by the Windows OS in realtime without requiring a reboot for installations or upgrades.

Download a 30-day evaluation »

Condusiv Technologies Contact Us // 800-829-6468 // www.condusiv.com

THE RESULTS (CONTINUED)



Gary Ketchum, IT Manager at Marcus Food Co., highlighted DymaxIO's benefits: "With DymaxIO installed in each VM, we're seeing excellent response times as much of our workload is now fulfilled by memory, reducing the need to access storage. It's wonderful that this not only improves performance but also reduces network traffic, especially with our iSCSI storage. DymaxIO is an awesome product, and I wouldn't want to be without it."

"Performance is so good that our users are spoiled! I'd hate to think what the system performance would be without DymaxIO. The real peace of mind comes from DymaxIO's cost-effectiveness combined with its exceptional functionality," added Ketchum.

Marcus Food Co. also discovered DymaxIO delivers the tangible benefit of extending hardware life. "With DymaxIO, our storage devices will last much longer because we're not burning them out with excess I/O traffic. It's a win-win for a very reasonable cost," stated Ketchum.

Erik Frees, IT Engineer at Marcus Food Co., echoed these sentiments. "With DymaxIO, our SSDs will now last for a very, very, very long time. After 3 ½ years of heavy production use, our SSDs still have 98% of life! This must be some sort of monumental record. These SSDs could go for 10 years and still be fantastic thanks to DymaxIO. I estimate that we have saved hundreds of thousands of dollars due to extending our hardware lifecycle by several years," said Frees.

"DymaxIO's performance is exceptional, like turbocharging our systems," added Frees. He summarized DymaxIO's impact, "The benefits are tremendous. Not only has our drive health improved because they don't have to work as hard, but the network traffic is lower. If we have a machine that doesn't have DymaxIO on it, we can definitely tell. Despite being on SSDs, the responsiveness stands out due to DymaxIO's ability to retrieve data from memory rather than fetching it from the SAN, which operates at ultra-fast speeds of hundreds of gigabytes per second. My end users love the snappier performance. For me, I'm making my hardware last 10 times longer because I'm not pounding it to death every instant of its life," said Frees.

"The bottom line is that DymaxIO has given us great ROI and we've eliminated performance-related user complaints. DymaxIO is one of those few software solutions that has consistently performed over the years and my IT career would not have been the same without it," concludes Ketchum.