DX*i*-Series & Scalar Series

Leading Scoreboard Manufacturer Keeps Winning with Quantum

Exploding data protection requirements can drive periodic upgrades to storage infrastructures for any company. At Daktronics, a leading electronic scoreboard provider, this meant expanding and updating an existing Quantum DXi disk appliance and Scalar tape library installation with new equipment—an easy decision given Quantum's proven track record for outstanding performance and exceptional customer service.

WHEN DATA GROWTH OUTPACES EVEN DISK-BASED DEDUPLICATION

As a worldwide leader in the design and manufacture of electronic scoreboards, Daktronics, Inc., provides sports teams and fans the critical information they depend on to keep track of a game or match. However, when it came to protecting the ever-increasing amount of data critical to its own business, the company realized it needed to continue advancing its backup system to keep up.

Founded in 1968 by two South Dakota State University electrical engineering professors and headquartered near the University in Brookings, Daktronics has matured into a company with annual revenues that now total half-a-billion dollars. And like any other growing company, in recent years Daktronics has suffered from near-exponential growth in data that must be backed up.

Years earlier, the company had first faced the challenge of exploding data protection requirements when the IT team realized its EMC CLARiiON network storage system could no longer keep up with the data growth. In fact, the existing system routinely failed to complete timely weekend backups.

Daktronics considered EMC and Data Domain as possible solutions, but EMC didn't have a target-based deduplication product at that time. And the team didn't like Data Domain's command line interface because ease of use was an important factor.

Daktronics solved the problem by deploying a Quantum DXi7500 enterprise disk backup system with deduplication. At the time, Brian Davis,

Daktronics' backup administrator, recalled that "With the Quantum DXi7500, we completed all full backups during the weekend. And, thanks to the data reduction we got with deduplication, we could keep a month's worth of data on disk, not just a couple days, which made restores a lot quicker and much easier to do."

However, that was at a time when the company was sending 180TB to tape on a monthly basis. Now Daktronics generates almost that much—130TB of backup data—in a week. Even their DXi7500 couldn't keep up.

SCORING WITH QUANTUM FOR BETTER PERFORMANCE AND SUPPORT

Davis knew the company needed to upgrade its data protection infrastructure, and his experience with Quantum gave him an exact idea of where to start.

"To be honest, there was never really any question that we'd be sticking with Quantum," he says. "Quantum has the best performance and ease of use, and the DXi® equipment has been incredibly solid. When there is a problem, Quantum's support is easily the best I deal with—and I get a lot of exposure to the support organizations for other storage vendors."

As Davis explored his options for upgrading from the DXi7500, Quantum's DXi6700 Series was the logical choice. However, because Daktronics uses EMC for its primary storage, Davis looked at competing equipment from EMC Data Domain—and Quantum was the clear winner.

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Backup Administrator, Daktronics

SOLUTION OVERVIEW

- Quantum DXi6700 Series appliances
- Quantum Scalar® i6000 tape library
- Quantum Vision® reporting software

KEY BENEFITS

- Reduces backup volume by more than 90% through deduplication
- Improves ability to keep up with continual data growth
- Enables a full month's worth of backup to be kept on disk
- Ensures predictability and uptime for data protection systems through outstanding support

"In terms of capacity, Quantum's DXi6700 Series was able to handle more than the competing EMC Data Domain products, and its throughput speed was pretty significantly ahead," he explains. "And again, there was Quantum's outstanding support to factor in its favor, which kind of blows the competition away."

The reliability and performance of Quantum equipment also led Daktronics to upgrade an existing Scalar i2000 tape library to a Scalar i6000. The Scalar i2000 has a unique field-upgradable design that allows customers to preserve their investment while gaining greater value by installing the latest LTO-6 tape technology and updated firmware.

"Upgrading to the Scalar i6000 was painless: Quantum field engineers handled all the updates and configuration for us," says Davis. "And there was a resulting huge jump in performance and capacity. It was actually a pretty drastic improvement."

AS DATA CONTINUES TO GROW, QUANTUM IS THERE

Daktronics now has three Quantum DXi6700 Series appliances that provide it with a reliable global backup and disaster recovery capability. These include a 64TB capacity DXi6702 in its main data center, a 24TB DXi6702 system in its Shanghai office, and a 16TB DXi6701 in a remote data center in Sioux Falls.

Virtually all of the company's data is sent to its main DXi for backup and then offloaded to the Scalar i6000 for disaster recovery. A few key applications

also have their data replicated to the DXi appliance in Sioux Falls for an added level of protection and to provide faster access. Davis uses Quantum's powerful Vision reporting software to keep on top of all the systems, whether it's a quick glance to make sure everything is healthy or drilling down to generate specific reports on system performance.

One of the biggest benefits in upgrading has been the team's ability to keep up with data growth at Daktronics. The Quantum solution allows the company to keep a month's worth of that data on the primary DXi appliance at all times.

"We don't wait on the backup at all, and we're hitting that equipment pretty hard," says Davis. "Yet the DXi6702 keeps up with everything we send, right now 520TB a month, without breaking a sweat."

And for Davis, it's important that Quantum's outstanding service extends throughout the organization.
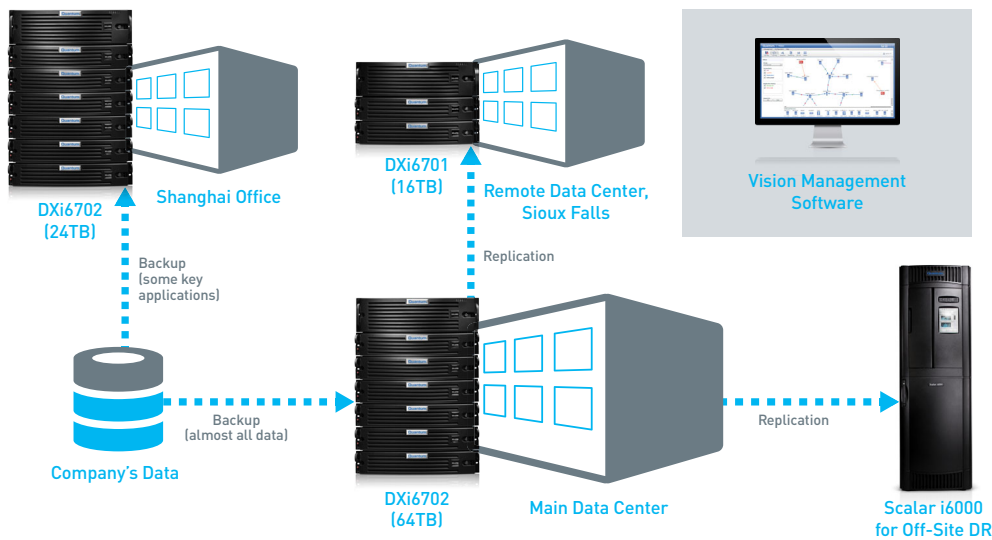
"More than just the great support I get from Quantum, I've had a few different sales and technical reps from the company over the years, and all of them have been great." he notes. "Other companies seem much more variable in terms of quality, but with Quantum, whenever I need something, it seems like they're already ahead of me in looking out for our best interest. I really respect that."

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ABOUT DAKTRONICS

Daktronics has strong leadership positions in, and is the world's leading supplier of, large screen video displays, electronic scoreboards, computer-programmable displays, digital billboards, and control systems. The company excels in the control of large display systems, including those that require integration of multiple complex displays showing real-time information, graphics, animation, and video. Daktronics designs, manufactures, markets, and services display systems for customers around the world, in sport, business, and transportation applications.

DXi6702
(24TB)   Shanghai Office

Backup
(some key
applications)

Company's Data

Backup
(almost all data)

DXi6702
(64TB)   Main Data Center

DXi6701
(16TB)   Remote Data Center,
Sioux Falls

Replication

Vision Management
Software

Replication

Scalar i6000
for Off-Site DR

Quantum®
BE CERTAIN

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