Quantum. CASE STUDY



DXi-Series and Scalar Series

DXi Anchors Comprehensive Data Protection Solution for Global Biopharmaceutical Company

The rapid expansion of a global biopharmaceutical company meant data protection requirements were outstripping available capacity. The company's move to an all-Quantum solution featuring disk, tape and software for both physical and virtual environments has delivered dramatic cost savings, faster backup and restore, and a scalable infrastructure that keeps it ahead of growth.

HIGH COST OF INFINITE RETENTION

Based in the U.S., this leading biopharmaceutical company has a workforce of 1,100 employees spread across 28 offices in North America, Europe and Asia. The company's rapidly growing headcount and dramatically increasing data storage requirements were stretching the organization's limited IT resources and aging tape infrastructure to the breaking point. Complicating matters were regulatory and legal requirements for retaining copies of data indefinitely.

Faced with infinite retention requirements, the company adhered to a strict rotating backup schedule at its main production data center in Connecticut. Everything from user files to SharePoint, SQL, Oracle and Exchange databases were backed up incrementally during the week and fully on weekends. And while remote office backups were relatively quick given their limited data sets, backup at the main data center was another matter.

"Our backup was basically running 24/7, and because we never reused tapes once they went off-site, our costs were going through the roof," the company's IT administrator reports. "At the peak, we were spending more than \$10,000 per month just on tapes."

Restores were even worse. Basic file restores were often required every few days, and if the tapes were offsite, the restores would take at least a week to complete. More complex full restores, which typically occur once or twice a quarter, took considerably longer.

"Even recovering a few critical emails for the CEO required restoring the entire Exchange database," the IT spokesman says. "It took more than eight hours to get them back, which wasn't fun. Eventually I found myself spending six hours a day triaging file recoveries, swapping tapes, babysitting failed backups, etc. There was almost no time to do anything else."

CHOOSING DXI OVER OTHER APPLIANCES AND SOFTWARE-ONLY OFFERINGS

To address the spiraling data protection costs, drain on resources and uncertainties around restores, the company decided it needed a disk-based solution and evaluated offerings from both EMC Avamar and Quantum. The EMC Avamar product was quickly eliminated due to its exorbitant cost and complicated hardware/software architecture. The company instead settled on a Quantum DXi7500 appliance—a solution that the IT spokesman describes as "fantastic."

"The DXi® appliance cut our backup times in half, and restores were almost immediate," he says. "It got to the point where employees almost expected instant gratification. At the same time, we bought a Quantum Scalar® i500 library to consolidate our tape storage, and between the two we drastically cut our tape costs and backup administration."

As data growth and backup demands continued to swell, the company entered an unfortunate cost-cutting phase that led them to try what appeared to

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Company IT Administrator

SOLUTION OVERVIEW

- Quantum DXi8500, DXi6550, DXi6540, DXi6520 appliances
- Quantum Scalar i500 tape library
- Quantum vmPR0 software
- Quantum Vision reporting software
- Symantec NetBackup and OST plug-in

KEY BENEFITS

- Cuts backup times in half
- Restores lost data in minutes rather than days
- Saves more than four months per year in IT administration time
- Captures more than \$100,000 in annual tape savings
- Enables efficient tiered storage strategy

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be a cheaper, software-only deduplication alternative. The results were disastrous.

"I think we had a support ticket open continuously for almost a year," reports the IT spokesman. "We had major, major issues and realized that we should have stuck with the DXi solution—it just worked for us and clearly provided much greater value."

Before going back to a DXi appliance, however, the company worked with reseller CDW to evaluate offerings from EMC Avamar and EMC Data Domain as well. Once again, DXi stood out as the most costeffective, easy-to-manage and scalable solution, and this time the company took advantage of the breadth of Quantum's portfolio—the company purchased a 50TB DXi8500 for its main production center, a 56TB DXi6540 appliance for disaster recovery, and multiple 8TB and 16TB DXi6520s for data protection at smaller remote sites worldwide.

GLOBAL ALL-QUANTUM SOLUTION IMPROVES OPERATIONS AND SAVES MONEY

The DXi-Series' high performance and powerful deduplication have been a huge boon for the company, keeping backup windows manageable even as its data has grown to over 65TB—up more than 400 percent in three years. With DXi deduplication ratios as high as 99.1 percent, the IT staff has also been able to keep much of the data archived for years on the DXi systems.

"We only move monthly and annual backups to tape for off-site storage, and even then we still keep them on DXi for up to three years," says the IT spokesman. "That's brought our tape consumption and costs down by almost a factor of ten, saving \$100,000 annually."

The DXi's direct path-to-tape feature has also dramatically improved throughput. In fact, it has cut bandwidth requirements in half as the company no longer has to route both backup and tape transfers through the same media server—ensuring smooth and simultaneous backup and tape offload.

In addition, restores are nearly instantaneous, and the company is adopting Quantum's vmPRO virtual machine data protection software to further enhance restores in some international sites. "With 24/7 operation, it can be problematic for Europe or Asia to get a file off our DXi8500 in the middle of the night," explains the IT spokesman. "Quantum's vmPRO makes it easy to find and grab needed files even when you don't have much training, allowing our remote IT staff to handle restores without local support."

The company plans to take further advantage of the DXi's replication capabilities when it opens a Midwest data center for better disaster recovery. It has already purchased a new 56TB DXi6550 as part of that initiative. The company spokesman notes that the DXi's offsite replication is "extremely efficient" compared to the other products he's tried.

The DXi's simple interface has also kept administrative time to a minimum.

"The interface is entirely intuitive; even something as complicated as bonding network segments is straightforward," says the spokesman. "Like everything with Quantum, it makes it easy to do just about anything you might need."

In addition, by using Quantum's Vision® reporting software, the company has been able to manage its entire Quantum infrastructure centrally, regardless of where individual systems are located. In total, the company estimates that it has saved four months of administration time per year.

Overall the DXi-Series deployments have gone so well that the company has created a tiered storage infrastructure to support rapid data growth.

"When we opened a new office, it used to be a shot in the dark from an IT perspective," the IT spokesman reports. "Because of the efficiency of the DXi appliances, I've now got a matrix filled out that indicates precisely what DXi system to deploy based on headcount, and I have much greater certainty about meeting user needs."

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ABOUT QUANTUM

Quantum is a proven global expert in Data Protection and Big Data management, providing specialized storage solutions for physical, virtual and cloud environments. From small businesses to major enterprises, more than 50,000 customers trust Quantum to help maximize the value of their data by protecting and preserving it over its entire lifecycle. With Quantum, customers can Be Certain they're able to adapt in a changing world - keeping more data longer, bridging from today to tomorrow, and reducing costs. See how at www.quantum.com/BeCertain.

