



DXi-Series & Scalar Series

Quantum DXi and Scalar Provide Small Businesses with the Peace of Mind that Comes from Simplified, Tiered Data Protection

Small businesses need data protection too—and without the IT staff of larger organizations, simplicity is paramount. For Monticello Associates, replacing an old tape backup system with a new Quantum DXi® appliance and Scalar® tape library simplified and accelerated the backup process, while providing the foundation for a more comprehensive, secure data protection strategy.

AGING INFRASTRUCTURE TOO SLOW AND UNRELIABLE FOR GROWING BACKUP NEEDS

Monticello Associates is an employee-owned asset management and investment consulting business that employs 39 people at its headquarters in Denver and another five at its Cleveland satellite office. The company has two data centers, one onsite at its headquarters and a second for business continuity and disaster recovery at a colocation facility near Denver. While it's a small business, Monticello is growing quickly, with a long-term strategy that envisions the adoption of new technologies and services like desktop virtualization.

When Trevor Fougere, Monticello's IT Director and Computer Systems Analyst, joined the firm in 2007 as its lone, full-time IT professional, one of the first things he noticed was that the company had a very old and questionable backup system.

"It was old and troublesome," says Fougere. "We were dumping our main file shares, as well as our mail storage onto an old Dell PowerVault LTO-2 tape system. Tapes were recycled every two months. We kept the most recent months' worth of tapes onsite and sent the others to offsite storage. But there was no way to tell if the tapes were useful, and we experienced many failures during backup and recovery operations. We would have to restart backup jobs after each failure and monitor until completion."

"Basically we had old tape, old tape drives, and an older-generation server. It just wasn't 100% reliable."

Having long worked in the financial services industry, Fougere knew this was a serious and immediate problem for Monticello. As a stopgap, he implemented a disk-to-disk-to-tape (D2D2T) system with a single LTO-2 tape drive. Monticello would have the ability to do limited restores from disk, but not much else. He also adopted a more rigorous backup process, with weekly backup tapes stored offsite with Iron Mountain for a year and annual tapes going offsite for seven years.

But Monticello's technology foundation was expanding. The company was growing both its file server and Exchange server structure, had added a virtualized environment using VMware, and had implemented an EqualLogic SAN at its main Denver offices that replicated to an identical SAN at its secondary facility for disaster recovery.

Now the company needed to upgrade its data protection.

QUANTUM DELIVERS COMPREHENSIVE DATA PROTECTION

Fougere wanted to establish a solution that would provide 3-5 years of headroom for the company's backup and recovery needs. He still believed D2D2T offered the most cost-effective approach, but he wanted a system that was faster for both backup and restore, more reliable and less costly than his current system, and one that reduced the cost of tape and minimized manual handling. He also



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Trevor Fougere

IT Director and Computer Systems Analyst, Monticello Associates

SOLUTION OVERVIEW

- Quantum DXi4601 appliance
- Scalar i40 tape library
- Symantec Backup Exec 2012

KEY BENEFITS

- Speeds backups
- Accelerates recovery time
- Boosts reliability
- Lowers tape cost

needed it to incorporate support for Monticello's legacy LTO-2 tape.

"Given that we're a highly reputable company that deals with many influential clients and money managers, I didn't want to experiment," Fougere notes. "Disk-to-disk-to-tape is a proven system for backup, and you can't beat it for price."

In addition to better performance, Fougere wanted to be able to store a full month of data onsite (one full backup and four incremental backups) under a greatly expanded backup plan that included additional system-states and a development environment—as well as the possibility of virtualized desktops using Citrix's VDI. At the outset, Fougere estimated the total backup size to be approximately 900GB before deduplication, with the potential for that to double once the new backup plan was fully in place.

Monticello sought bids from hardware vendors and VARs, including H.A. Storage Systems, which specializes in data storage and data management solutions. Monticello considered three options:

- A basic hardware upgrade of its current system, comprised of a Dell T420 server with local storage and a PowerVault (LTO-4) tape library.
- An EMC DD620 deduplication appliance with DataDomain and Tandberg t40+ tape (LTO-5) connected to an unspecified server. Monticello would have had to find a third party to migrate its legacy tape to LTO-5.
- A Dell R310 server, Quantum DXi4601 deduplication backup appliance, Quantum Scalar i40 (LTO-5) tape library, and a single LTO-3 tape drive for legacy data access (the solution proposed by H.A. Storage Systems).

In the end, according to Fougere, the choice was simple.

"From a capability/performance standpoint, the Quantum-based solution was tailor-made for our needs," he says. "I really liked the idea of having an integrated solution, and I'm very familiar with Quantum."

DXi OFFERS ROOM TO GROW YOUR BUSINESS

The 8TB capacity of the DXi solution leaves quite a bit of room for Monticello's expanding data needs. So even as the company has added server-states and more Exchange data, with the appliance's powerful data deduplication they haven't come close to maxing out the system.

"We keep upping our retention periods to try and get past the 20 percent level of storage used on the DXi, and we still can't get there," Fougere comments.

And Monticello Associates is also benefiting from the impressive performance of the DXi solution. Full backups are set to run after close of business on Fridays and are usually done by early Saturday morning—just a fraction of the time they used to take.

From Fougere's perspective, the backup capacity and speed are matched by the reliability of the solution.

"We haven't had an ounce of trouble with it," says Fougere. "With our old system, I'd wake up in the middle of the night with nightmares of failed backup jobs. But since we started using the comprehensive DXi and Scalar solution from Quantum, our backup failures are pretty much non-existent."

In addition, the Scalar tape component is a key part of the overall system. Monticello is now able to keep six months of weekly file server backups on hand.

"It's great to have those available for immediate restore if we need them," he notes.

Overall, the new solution has been a perfect fit for a small business like Monticello Associates.

"Compared with some of the other vendors and VARs we spoke to, working with Quantum and H.A. Storage Systems has been a pleasure," says Fougere. "We're really happy."

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ABOUT MONTICELLO ASSOCIATES

Monticello Associates is an independent asset management consulting firm providing non-discretionary investment advisory services. Founded by B. Grady Durham in 1992, the firm's singular focus on endowment and foundation clients and high net worth families has been integral to its success.

With headquarters on Denver's historic Larimer Street and an additional office in Cleveland, Monticello Associates—named after the home of Thomas Jefferson—has grown into one of the country's leading asset management consulting firms. Still headed by Mr. Durham, the company today works primarily with many of the most prominent museums, hospitals, schools, and families in the United States.

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