Quantum_®



Scalar Series

Data Center Operator Uses Scalar Tape Libraries to Meet Customers' Changing Service Needs

As a data center service provider, Expedient Communications must be flexible and able to maintain stringent service level agreements with a wide range of customers. To differentiate itself from the competition and gain operational efficiencies, the company chose to install Quantum's highly scalable Scalar i6000 tape libraries in all eight of its data centers.

THE NEED TO STANDARDIZE STORAGE

Headquartered in Pittsburgh, PA, Expedient Communications operates a network of data centers in the eastern-central region of the US. All together the company occupies more than 200,000 square feet of operational floor space, where it hosts equipment or provides services for thousands of customers from startups to Fortune 500 corporations.

Like any company, Expedient deals with rapidly growing storage needs, but it also requires a storage platform that can meet widely varying service requirements of its customers. For some, nightly backups are fine, while others demand backups to be done every half hour.

Additionally, Expedient acquired many of its data centers over the last decade, and they often had different backup equipment and processes. This created inefficiencies and added complexity for Expedient when it came to managing operations for its multiple facilities.

"As a service provider, it is important for us to be operationally efficient, so it's critical that we have consistency across our platforms and among our data centers," says Alex Rodriguez, Vice President of System Engineering and Product Development for Expedient. "We decided that we needed to standardize to keep costs down and service levels up."

QUANTUM SHINES AMONG COMPETING TAPE PRODUCTS

When it comes to selecting new equipment, many companies will put out a request for proposal and conduct a "bake off" between different vendors. In this case, it was unnecessary. Because its data centers had operated independently, Expedient already had years of experience with a variety of tape library systems from companies such as Quantum, Oracle/Sun/StorageTek, Overland and Qualstar. After examining the performance of these libraries, the one that stood out was Quantum's Scalar® i2000.

"We operated a myriad of different solutions and had seen some pretty troublesome products," says Rodriguez. "We were impressed with the performance of the Quantum Scalar library, with its features and its functionality."

Expedient decided to deploy the Scalar i2000s in all its data centers. Later, as the company's needs outgrew the capacity of the Scalar i2000, Expedient examined other solutions. However, they didn't find any products that matched Quantum's Scalar i6000, the successor to the Scalar i2000.

Upgrading to the Scalar i6000 was quick and easy. Expedient operates its tape storage as a single library without any logical partitioning in the tape libraries and instead lets the backup software do the partitioning.



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Alex Rodriguez

VP of System Engineering and Product Development

SOLUTION OVERVIEW

- Quantum i6000 tape libraries with LTO-5 drives
- EMC Networker backup software

KEY BENEFITS

- Scales instantly to meet expanding customer demand for capacity
- Outperforms competition to meet stringent service level agreements
- Delivers reliable and secure backup for widely varying customer needs
- Provides flexibility and value to multiple data center facilities

CASE STUDY

"The backup software recognized the tape library, and we were up and running," says Rodriguez. "We did the cutover in less than a day, including a new backup infrastructure. We were very pleased with the migration."

With the first Scalar i6000 in place, Expedient began purchasing libraries for the rest of its data centers. By mid-2011 the company had five units in place with the other three scheduled for installation over the next year.

RESPONDING TO CUSTOMER NEEDS AND KEEPING ONE STEP AHEAD OF THE COMPETITION

"We are so pleased with Quantum's performance, its value from a pricing perspective, and its capabilities and expandability that there is no reason for us to switch to anything else," says Rodriquez.

The Scalar i6000 uses LTO-5 tape drives which can hold up to 3TB of data at a 2:1 compression ratio. Because its Scalar i2000 had LTO-3 tape drives with a quarter the capacity, Expedient was able to reduce the number of slots in operation when upgrading to the new library, leaving plenty of room for future growth.

With the ability to scale from 1 to 96 drives and hold 100 to 5,376 cartridges, the Scalar i6000 can store up to 16PB of data. However, using Quantum's Capacity-on-Demand feature, Rodriguez likes that he doesn't need to buy more capacity than he needs. He can add a hundred slots at a time without having to buy a whole extra frame.

"There can be a day when a customer comes in and drops 50 to 100TB of data that they need backed up for a significant retention period," he says. "When that happens, we have to be able to respond within days, if not hours, to meet our client's needs."

Rodriguez also says that the Scalar tape libraries help it to differentiate its service offerings so it can stay one step ahead of the competition.

"Our biggest competitor is in-sourcing," he says. "We have to make sure we provide our customers a service that, when compared to building it themselves, costs less, is easier to work with, and is more scalable and available. That's how we provide real value to our customers."

With the Scalar tape libraries, Expedient is able to deliver reliable, secure backup that meets individual customer service level agreements. The Scalar i6000's built-in redundancy and field upgradable components mean that if there is a hardware problem, Expedient can still meet customers' backup schedules—even those who back up twice an hour. And, as customers' needs grow, the company is prepared to grow the storage to meet their needs.

"As a service provider, we must be equipped to handle immediate growth and very quick turnaround times for a customer," says Rodriguez. "The Scalar platform enables us to easily license additional slots and not have to worry about significant fixed asset costs. This flexibility plus the reliable performance of the Scalar i6000 makes it a truly attractive tape library for us."

"As a service provider, we have to be able to handle immediate growth and very quick turnaround time for a customer. The flexibility the Scalar platform provides us in terms of being able to license additional slots and not have to worry about significant fixed asset costs was very attractive to us and something we leverage quite frequently."

Alex Rodriguez

VP of System Engineering and Product Development

ABOUT EXPEDIENT COMMUNICATIONS

Expedient is part of a network of eight nationwide data centers, and offers a wide range of managed services such as virtualization, cloud computing, remote backups, management of equipment, storage area networks and more. These proven managed services combined with reliable and redundant SSAE 16 compliant data centers enable Expedient to deliver premier colocation, network and managed services solutions to enterprise, commercial, education and government entities.