

Ceryx



Ceryx Primes for Growth in Email Services with a Flexible and Efficient ETERNUS Storage System from Fujitsu

Challenge:

Ceryx, a leading provider of hosted email systems, wanted to implement an easier-to-manage and more efficient storage infrastructure to better position itself for growth in the outsourced email solution and managed services markets.

Solution:

After evaluating several vendors, Ceryx selected the ETERNUS SAN storage system from Fujitsu to deploy in its data centers.

Benefits:

The Fujitsu ETERNUS system has helped Ceryx more efficiently manage and scale its storage resources. By centralizing storage capacity on the SAN, the company can easily add storage based on customer demand, optimize server performance independent of storage capacity considerations, and more quickly deploy new services such as Microsoft Exchange 2007.

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- Gus Harsfai, President, Ceryx



The ETERNUS® storage system from Fujitsu.

When it comes to providing reliable email services for clients, few companies take the responsibility more seriously than Ceryx. One of the leading email hosting service providers today, Ceryx offers a range of managed and hosted Microsoft® Exchange solutions that enable clients to outsource their messaging infrastructure to Ceryx’s redundant data centers in Toronto and New York.

With Ceryx, Fortune 500 email users gain reliable and “always on” email delivery. Corporate IT teams are able to free up personnel and server hardware previously dedicated to Exchange, maximize security, and provide users with performance equal to, or better than, in-house systems. Clients also gain efficiencies through Ceryx’s spam filters and value-added services like advanced security and email archiving.

Focused Like a Laser

Critical for many is Ceryx’s fully replicated IT infrastructure. This ensures automatic recovery of mail in the event of disaster at one geographic location, helping clients reach a level of compliance and reliability that few ever achieve with in-house systems. As Gus Harsfai, president of Ceryx, puts it, “We focus on messaging exclusively, and that’s allowed us to become the best at what we do. Companies like Mark Burnett Productions in the U.S., Rand Technologies, and Allstate Insurance Company of Canada trust us to route more than one million messages every day.”

The Fujitsu Edge

To maintain quality service levels, Ceryx works hard to outfit its data centers with the most reliable technology. One of its most beneficial additions is an ETERNUS® storage system from Fujitsu. A fourth-generation disk array system for use in mission-critical environments, the ETERNUS utilizes a Storage Area Network (SAN) architecture that centralizes storage for Microsoft Exchange.

Ceryx relies on ETERNUS to more efficiently scale its infrastructure as the business grows. “One of the chief benefits to the solution is that it is incrementally scalable,” points out Dave Penny, Ceryx’s CIO. “Because we can add storage or i/o capacity at any time, and independently of any server constraints, it’s pay as you go for storage, and that was very attractive to us.”

At Home with High-Powered Hardware

The ETERNUS hardware is right at home with other high-end systems in the Ceryx data centers. Rack-mounted Intel servers, for example, feature dual CPUs and redundant power supplies. Besides servers dedicated to

Exchange are additional systems running firewall software, BlackBerry® email services, and related messaging programs.

Like many large data centers managing Exchange, Ceryx has traditionally relied on direct-attached storage systems to add capacity as client storage requirements swelled. With direct-attached storage, there's a one-to-one relationship between the server and the storage unit. While storage systems can be very large, additional storage units cannot be added without acquiring more servers.

"When the storage ran out, we'd have to go out and buy new servers and storage," recalls Penny. "The lack of flexibility was an issue for us."

Optimized for the 21st Century

Ceryx counts on ETERNUS to help run its increasingly busy data centers more efficiently. According to Penny, what makes ETERNUS a great match for large mail customers is the way Exchange manages storage using inputs/outputs per second, or IOPS. "IOPS is one of the key metrics you consider when sizing Exchange back-end servers," says Penny. Using direct-attached storage, companies increase IOPS by adding disk drive spindles, but in the direct-attached world you quickly reach a limit for how much storage you can add onto a server. What's tricky with Exchange is trying to optimize mail workloads while simultaneously ensuring that enough storage space is available without wasting any. "If you're using the wrong equipment, the result can be inefficiency and wasted resources," says Penny.

By centralizing storage management in its SAN, Ceryx is better positioned to add storage and optimize Exchange for maximum performance at the same time. "Now we can distribute those IOPS across multiple platforms and systems, and scale our infrastructure more elegantly," says Penny. "ETERNUS will help us grow considerably faster and with fewer architectural headaches down the road."

Another performance metric Ceryx and other Exchange shops use is RPC latency. Exchange users experience latency as the delay when sending or receiving messages from their Microsoft Outlook® client. Because Ceryx prides itself on providing outsourced performance rivaling the best in-house systems, maintaining RPC

superiority was important in its choice of a SAN. "With ETERNUS we can size our servers well and optimize for the lowest possible RPC latency," says Penny. "It helps us maintain an excellent end user experience."

The Service and Support Factor

Ceryx did its homework on the overall SAN market before selecting the Fujitsu system. "We knew we wanted Fibre Channel SAN technology when we started our search," recalls Penny. "The usual suspects came up—EMC, IBM and HP." ETERNUS entered the picture after Penny's Director of Operations encouraged him to include Fujitsu in the evaluation. "He knew that Fujitsu had SAN technology and was extremely complimentary about their service and support." Both were critical issues given Ceryx's mission-critical applications.

Several factors ultimately stood out that led to Ceryx's choice of Fujitsu. High on the list was Fujitsu's willingness to provide operational performance data. "We were unable to get the other sales reps to provide that," says Penny. Meanwhile, a reference check with ETERNUS users came back extremely positive. "We knew that Fujitsu had great service after we talked to all of the reference accounts," says Harsfai.

A Partnership Approach

While Fujitsu's reputation for quality engineering played a role in the decision, Harsfai says it was not the deciding factor. "Every vendor we spoke to had various hardware benefits to show us. But at the end of the day we were looking more for reliability, overall cost effectiveness, and service. And that's where Fujitsu excelled. We very much value a partnership with our vendors."

A Smooth Rollout

Ceryx's favorable impression of Fujitsu was reinforced during the initial rollout of its SAN. "The planning of the installation and its execution went exactly according to schedule," says Penny. Adding that Fujitsu's services team proved even "more knowledgeable than expected," Penny says the equipment was installed over a two-day period following weeks of detailed implementation planning.

After training Penny's staff on various technical details, such as use of the ETERNUS SF AdvancedCopy Manager



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software for high-speed backups and restore, the Fujitsu team continued to be involved through several weeks of routine I/O testing. “Our engineers went through maybe 60 different tests in order to fully understand how this system would scale in our environment,” says Penny. “Throughout this entire process the Fujitsu folks were extremely responsive and knowledgeable.”

Enter Exchange 2007

Along with other advanced systems in its data centers, the ETERNUS helps position Ceryx to pursue growth opportunities in value-added services. It also helps Ceryx better leverage Microsoft Exchange 2007 platform. In a successful pilot project for Exchange 2007, Ceryx found that it was significantly easier to scale than its 2003 predecessor.

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- **Dave Penny, CIO, Ceryx**

The company sees great growth potential in combining Exchange 2007 with ETERNUS. “With Exchange 2007, you can get a larger number of users onto the platform than in 2003,” says Penny. “And that will save us time and money.”

Positioned for the Future

With a more efficient SAN operating behind the scenes, Ceryx gains a more streamlined and cost-effective storage infrastructure for managing all of its clients and services - including its dedicated managed Exchange solution for the enterprise and hosted Exchange solution for smaller and mid-size clients. In addition, the new hardware fits well with Ceryx’s business philosophy of messaging redundancy and reliability. “With ETERNUS, another important cornerstone is added to our 100% available architecture,” says Penny. “Our ETERNUS solution has helped position Ceryx for growth in both outsourced email and managed services markets.”