

BRINGING IT IN-HOUSE

Citizant enhances IT flexibility and scalability by creating a virtualized Dell infrastructure that will pay for itself in 18 months



SOLUTIONS

- BACKUP/RECOVERY/ARCHIVING
- CONSOLIDATION
- VIRTUALIZATION



CUSTOMER PROFILE

COUNTRY: United States

INDUSTRY: Technology/Professional Services

FOUNDED: 1999

NUMBER OF EMPLOYEES: 130

WEB ADDRESS: www.citizant.com

CHALLENGE

Accommodate business growth, enhance IT flexibility, and improve worker productivity by creating a virtualized infrastructure in-house.

SOLUTION

The Citizant IT group worked with Dell to design a virtualized IT infrastructure that includes VMware® virtualization software running on Dell™ PowerEdge™ servers with a Dell EqualLogic™ storage area network (SAN).

BENEFITS

Get IT Faster

- Deployed the new in-house infrastructure in just three weeks

Run IT Better

- Created a robust, flexible, and easy-to-manage infrastructure that will pay for itself within 18 months
- Accelerated new server deployment from two weeks to 10 minutes
- Decreased time to restore applications from several days to 15 minutes
- Increased employee productivity by simplifying access to e-mail and shared files

Grow IT Smarter

- Provided capacity for more than 100 percent future employee growth



Citizant's focus on providing superior customer service to its government customers has helped the company grow tremendously since the company's founding. In 10 years, the company has expanded from 2 to 130 employees and achieved annual revenues of more than US\$18 million.

“THE DELL EQUALLOGIC SAN WAS EASY TO DEPLOY, AND IT OFFERS AN INTUITIVE INTERFACE FOR ONGOING MANAGEMENT....WE CAN EXPAND ITS CAPACITY RAPIDLY. IF WE ADD A NEW ARRAY, THE CONTROLLER WILL INCORPORATE THAT STORAGE INTO THE SAN SEAMLESSLY.”

Shervan Torabi, IT manager, Citizant

Since its inception, Citizant had relied on outsourced IT services, but with additional growth on the horizon, the company decided to bring its IT infrastructure in-house. “With outsourced IT, it was too difficult and costly to make the changes we needed to support the business,” says Shervan Torabi, IT manager at Citizant. “We needed a more cost-effective, flexible, and rapidly scalable infrastructure that could accommodate change.”

The outsourced IT solutions also presented productivity challenges for employees. “Employees had to use a Citrix® interface to access everything from e-mail to word processing documents,” says Torabi. “During peak Internet usage hours, performance could be slow and frustrating. Employees also had to juggle multiple user IDs and passwords. We needed ways to simplify access to information. It was clear that we needed to bring IT in-house.”

In building the new in-house infrastructure, Torabi needed to minimize data center real estate. “We wanted to keep the entire infrastructure in a single rack to control costs,” says Torabi. “We chose to create a virtualized infrastructure so we could achieve the flexibility and scalability we needed in a compact space.”

CITIZANT CREATES A VIRTUALIZED INFRASTRUCTURE WITH DELL HARDWARE

Torabi worked with a Dell account representative to design the virtualized infrastructure based on Dell hardware. “We had standardized on Dell desktops and laptops, so we already had a strong relationship with Dell,” says Torabi. “For this project, I worked closely with the Dell account representative to design a new infrastructure and tailor it for our specific needs.”

“Working with Dell to make the right decisions ahead of time greatly simplified deployment,” continues Torabi. “With a little help from one co-worker, I set up the new infrastructure and migrated all of our data in only three weeks.”

The new infrastructure includes VMware virtualization software running on two Dell PowerEdge servers connected to a Dell EqualLogic PS5000E SAN. The 1U PowerEdge servers are equipped with the Intel® Xeon® processor 5400 series, which helps to create a compact infrastructure. “We needed to build a very dense infrastructure that could fit into a single rack. The Dell PowerEdge servers with Intel

HOW IT WORKS

HARDWARE

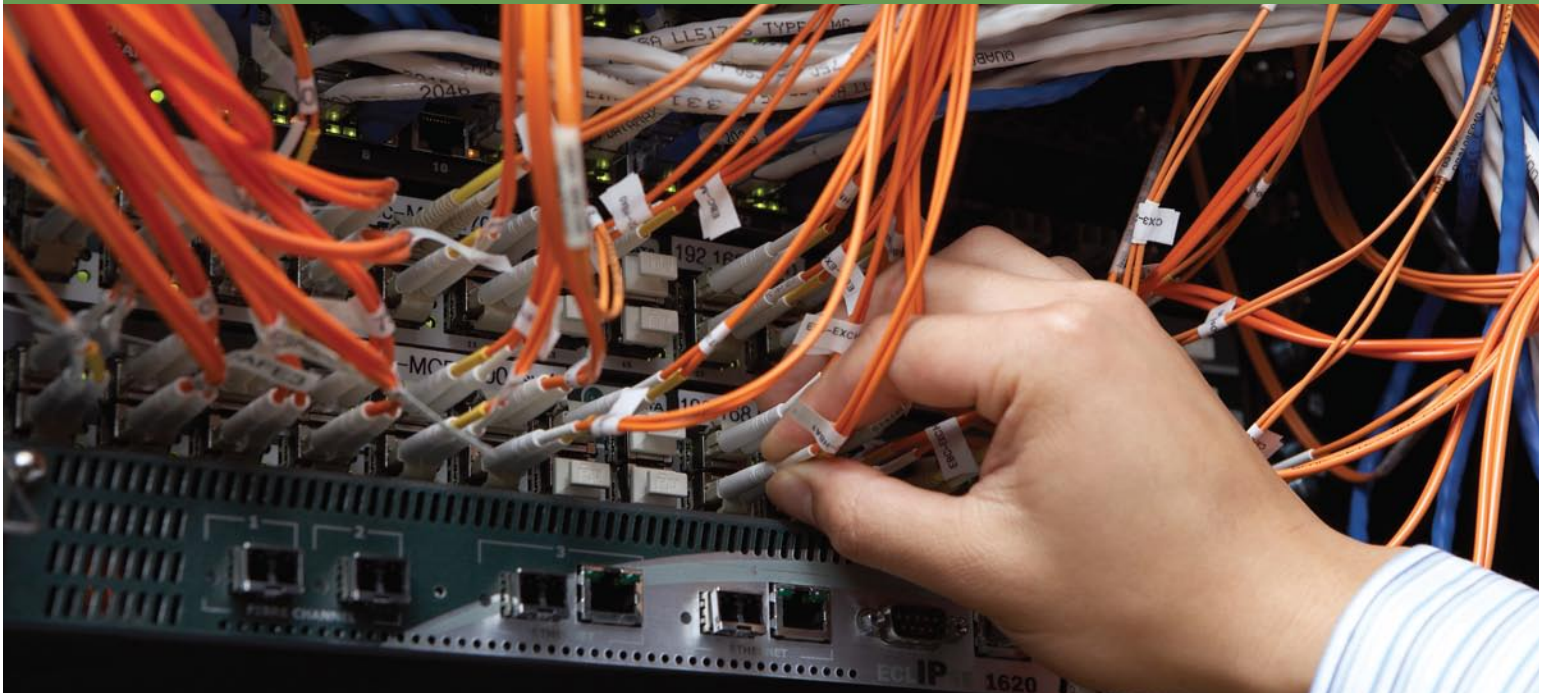
- Dell™ EqualLogic™ PS5000E storage area network (SAN)
- Dell PowerEdge™ 1950 servers with the Intel® Xeon® processor 5400 series

SOFTWARE

- Microsoft® Exchange Server 2007
- Microsoft SharePoint® Services 3.0
- Microsoft Windows Server® 2003
- VMware® ESXi Server

“WE NEEDED TO BUILD A VERY DENSE INFRASTRUCTURE THAT COULD FIT INTO A SINGLE RACK. THE DELL POWEREDGE SERVERS WITH INTEL XEON PROCESSORS DELIVER THE PERFORMANCE WE NEED FOR VIRTUALIZATION IN A VERY SMALL PHYSICAL FOOTPRINT.”

Shervan Torabi, IT manager, Citizant



Xeon processors deliver the performance we need for virtualization in a very small physical footprint,” says Torabi. “The servers also provide several redundant components to help ensure availability for these critical applications.”

DELL EQUALLOGIC SAN PROVIDES SIMPLE SCALABILITY AND SIMPLE MANAGEMENT

The Dell EqualLogic SAN offers an easy-to-use storage solution. “We can’t afford to hire a Fibre Channel SAN administrator,” says Torabi. “The Dell EqualLogic SAN was easy to deploy using our existing Ethernet infrastructure, and it offers an intuitive interface for ongoing management. If we need to modify configurations, adjust the size of a volume, or make any other changes, we can do so on the fly, without downtime. The Dell EqualLogic SAN delivers all the benefits of a SAN without the need for specialized skills.”

The SAN also provides simple scalability. “We can expand its capacity rapidly,” says Torabi. “If we add a new array, the controller will incorporate that storage into the SAN seamlessly. We’re anticipating significant company growth in the next year, so that scalability will be essential.”

VIRTUALIZATION ENHANCES IT FLEXIBILITY, REDUCING APPLICATION DEPLOYMENT TO 10 MINUTES

Citizant currently runs 11 applications in the virtualized environment, including Microsoft® Exchange 2007 and SharePoint® Services 3.0 plus a Web server, help-desk ticketing system, proposal development software, and more. “With just two Dell PowerEdge servers, we can run all of our current applications and still have headroom for future growth,” says Torabi.

“Virtualization helps increase IT flexibility tremendously,” says Torabi. “It might take two weeks to buy and configure a new physical server, but I can deploy a new virtualized test environment or production server in about 10 minutes. As a result, I can be much more responsive to new business requests.”

VIRTUALIZATION REDUCES POTENTIAL DOWNTIME FROM DAYS TO 15 MINUTES

Torabi also relies on the virtualized server infrastructure to help ensure application availability in the event of a hardware failure. “Without virtualization, it could take hours or days to rebuild an application if a physical server fails,” says Torabi. “With the current environment, I can simply point the virtual machine data on the SAN to a working server and have the application running again in about 15 minutes.”

“WE NEED A SIMPLE WAY TO PROVIDE LONG-TERM DATA STORAGE. THE DELL POWERVAULT DL2000 DISK BACKUP SYSTEM POWERED BY COMMVAULT WILL LET US SET POLICIES AND RUN BACKUPS WITH VERY LITTLE INTERVENTION.”

Shervan Torabi, IT manager, Citizant

CITIZANT PLANS FOR THE FUTURE WITH DELL

While the virtualized environment and Dell Equal-Logic SAN keep data available, additional Dell hardware will help protect data for the long term. Torabi plans to incorporate a disk backup system into the infrastructure soon. “We need a simple way to provide long-term data storage,” says Torabi, “The Dell PowerVault DL2000 disk backup system powered by CommVault will let us set policies and run backups with very little intervention. Having a disk-based solution also means that we can restore data quickly, without having to find and load a tape. And the deduplication capability lets us save storage space and keep more backups for longer periods of time.”

IN-HOUSE INFRASTRUCTURE ENHANCES WORKER PRODUCTIVITY

Purchasing new hardware has meant some short-term costs, but the Citizant team clearly recognized the long-term gains. “We expect that the hardware will pay for itself within 18 months,” says Torabi. “But we don’t have to wait to feel the impact of these changes. Employees no longer have the frustration and confusion of dealing with the previous interfaces. They can just tap into our in-house network directly. As a result, they can focus on delivering the outstanding service that our customers rely on. There’s no question that the new Dell infrastructure is a sound investment.”

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