

STAYING ONE STEP AHEAD

Cutting-edge SaaS solution provider revs enterprise databases up to 80% faster with high-performance computing solution built on Dell



SOLUTIONS

- HPC
- BACKUP/RECOVERY/ARCHIVING
- DATABASE



CUSTOMER PROFILE

COUNTRY: Redmond, WA (USA)
INDUSTRY: Technology
FOUNDED: 2002
NUMBER OF CONTRACTORS: 15
WEB ADDRESS:
www.cybersavvy.net

CHALLENGE

CyberSavvy needed to improve the performance of its DataPlace solution, a software-as-a-service "Database Factory" that automates the creation, modification and hosting of custom enterprise databases. The company also needed hardware optimized for Microsoft® SQL Server™ 2008, and wanted to upgrade to more powerful mobile workstations for its application developers to improve their productivity with the new Microsoft Visual Studio 2008 and Microsoft Expressions.

SOLUTION

CyberSavvy deployed Dell™ PowerEdge™ 2950 servers with 64-bit Intel® Xeon® quad-core processors, a Dell PowerVault™ MD3000 direct-attached storage array and Dell Precision™ M6300 mobile workstations with Intel Core™ 2 Duo Extreme Edition processors. The company was also able to repurpose its former storage solution, a Dell PowerVault NX 1950, as its backup repository, with help from Symantec Backup Exec System Recovery 8 software purchased through Dell.

BENEFITS

RUN IT BETTER

- Up to 80% faster creation of enterprise databases (less than 2 minutes vs. 10 minutes)
- Up to 95% faster application builds in Visual Studio 2008 (10 seconds vs. 3 minutes)
- Able to run virtual machines on notebooks
- Snapshot capabilities allow fast system restore onto development environment
- Quick Dell systems analysis identified hardware performance bottlenecks, improving performance for the new Microsoft SQL Server 2008

GROW IT SMARTER

- Flexible growth through Dell leasing option
- CyberSavvy's DataPlace solution decreases database development costs by 80%



You know the core people who drive your company's success: Those unflappable individuals everybody turns to for the right answers at the most critical times. Every company has a few pillars upon which the success of the business rests—the kind of people that carry their own load as well as some of the load of those around them.

“**DATABASE DEVELOPMENT COSTS CAN ACCOUNT FOR MORE THAN HALF OF OUR DEVELOPMENT BUDGET. NOW IT'S LESS THAN 10 PERCENT. THAT'S DUE TO A COMBINATION OF OUR OWN DATAPLACE SOLUTION, SQL SERVER 2008 AND DELL HARDWARE.**”

Peter Hammond, President, CyberSavvy.BIZ

In 2001, in the midst of the dot-com fallout in Seattle, Peter Hammond had an idea. What if he started a company and hired only those core people? What could that business accomplish?

“I'm here to tell you, amazing things,” says Hammond, founder and president of CyberSavvy.BIZ, a Redmond, Washington-based software development services provider of Microsoft .NET solutions. “When I started this company, my focus was on bringing together the best talent, giving them the best technology, providing the vision of what to build and then getting out of their way. The outcome has been a quantum effect of being able to develop applications in a very short period of time with high impact results without compromising quality.”

CyberSavvy.BIZ is the development arm that builds enterprise solutions for its sister business, CyberSavvy.NET—a separate business entity—to sell into the marketplace via a software-as-a-service (SaaS) model.

GOING 100% DELL

When Hammond started the company in 2002, he equipped the data center with bargain-basement deals on hardware being sold off from dot-com failures. After a while, he began to

notice a pattern with the servers.

“I picked up some Compaq servers, one HP and several Dell systems,” he recalls. “With the Compaq's, the fans and hard drives would fail, and to get new parts for them was a nightmare. But we hardly ever had any problems with the Dell machines, and if anything did go wrong—no matter how minor—Dell was always there very rapidly to meet our needs. We haven't had a Dell production machine die on us, ever.”

First and foremost, Hammond promised his top-notch developers that they would have access to the best technology available. When it came time to take the company's infrastructure to the next level, Hammond decided to partner exclusively with Dell for CyberSavvy's hardware needs.

“Five years ago, I called Dell and said, ‘I need the best equipment you have, it needs to be mobile, and it needs to be ready for developers to work on and be successful,’” he says. “And Dell suggested an option that I had not anticipated, which was through business leasing. The advantage of leasing was very profound for me as a small business owner: Since I didn't have to direct large amounts of capital into purchasing hardware, I used it to offer above-average contract rates for solid talent.”

HOW IT WORKS

HARDWARE

- Dell PowerEdge 2950 servers with 64-bit Intel Xeon quad-core processors
- Dell PowerVault MD3000 direct-attached storage array
- Dell PowerVault NX 1950 Unified Network Storage System
- Dell Precision M6300 mobile workstations with Intel Core 2 Duo Extreme Edition processors

SOFTWARE

- Microsoft Windows® Server® 2003 R2 Enterprise 64-bit Edition
- Microsoft .NET Framework
- Microsoft SQL Server® 2008 Enterprise Edition
- Microsoft Visual Studio® 2008
- Microsoft Windows Vista®
- Symantec Backup Exec System Recovery 8

SERVICES

- Dell Support
- Dell Financial Services

“I’M VERY HAPPY WITH THE DELL PRECISION M6300. IT’S THE BEST MOBILE WORKSTATION I’VE EVER HAD. ONE PARTICULAR SOLUTION BUILT IN JUST 10 SECONDS ON THE NEW MACHINE. PREVIOUSLY IT WOULD HAVE TAKEN UP TO SEVERAL MINUTES TO BUILD.”

Chadd Nervig, Developer, CyberSavvy.BIZ

GETTING ANSWERS TAILORED TO SMALL BUSINESS

Having watched other companies get squeezed by hardware vendors, Hammond was understandably wary of so-called “small business programs.” He noticed a significant difference in Dell’s approach.

“I was treated like a partner from day one,” he says. “That’s something not usually afforded to small businesses. Dell understood I was a small business, so I needed small answers. They didn’t try to sell me things I didn’t need, and they weren’t trying to see how much money they could get out of me all at once. Dell realizes that a small business may start small, but will grow if given the right resources to succeed. Our success now is due in large part to Dell’s help in the beginning.”

When CyberSavvy needed to accelerate the performance of its DataPlace solution—an automated database production factory sold as a solution that enables quick development and deployment of enterprise SQL databases—Dell was there with answers.

“With the help of Microsoft, Dell did a thorough analysis of our environment,” says Hammond. “They determined that we were running into bottlenecks with RAM, and also with the iSCSI protocol we were using for connecting SQL Server to the storage array. With the ever-increasing number of databases we had and the large amount of I/O that was going on, it was having trouble keeping up.”

IMPROVING PERFORMANCE BY UP TO 80%

At the time, Hammond was extrapolating future performance requirements, and didn’t intend to refresh the hardware immediately. But in 2007, Microsoft invited CyberSavvy to join its internal Technology Adopters Program (TAP) to help evaluate the new Microsoft SQL Server 2008.

“This was quite an honor, because the TAP program is traditionally for internal Microsoft groups only,” says Hammond. “But we have long-standing relationships with Microsoft, and they knew we were pushing the envelope on SQL Server 2005 and wanted to see what we could do with 2008.”

Knowing that the performance bottlenecks Dell identified would keep CyberSavvy from realizing the full potential of SQL Server 2008, Hammond asked Dell to recommend an appropriate hardware platform. At Dell’s suggestion CyberSavvy purchased two PowerEdge 2950 servers with 64-bit Intel Xeon quad-core processors—one for production, the other for failover—each equipped with 32 GB of RAM.

A Dell PowerVault MD3000 direct-attached storage array provides fast access to data, essentially acting as a storage area network (SAN) connected via serial-attached SCSI (SAS) cables instead of Fibre Channel. “A large part of our success was due to the direct-attached SAN,” says Hammond. “Rather than trying to sell us more than

we really needed, Dell understood our immediate requirements and reasonable growth expectation. The MD3000 has been perfect for our needs.”

The combination of SQL Server 2008 and the new Dell servers and storage immediately dropped the time it takes to create a new DataPlace publication database from 10 minutes to less than two minutes—an 80 percent performance improvement.

This technology also helped CyberSavvy launch a brand-new SaaS product line called Project360°, a productivity and task-tracking solution. Using their DataPlace solution running on the new Dell hardware and SQL Server 2008, the company completed what would have previously been a three-month project in one-third the time.

“Project360° went from a great idea to production in under a month,” says Hammond. “And the results really blew our customers away. When you’re selling software-as-a-service, you have to give your customers confidence that they can let go of the controls. From the news, there are a lot of other providers out there who are building new services in the clouds, and when they have slow performance or go down it’s really hurting their customers’ business. We don’t have to worry about that, because we have tried and true Microsoft enterprise technology on solid Dell hardware. And it’s not even breaking a sweat yet.”

MOBILE WORKSTATIONS ENABLE 95% FASTER APPLICATION BUILDS

In addition to providing speed, scalability and reliability in the data center, Dell has helped CyberSavvy's developers achieve new heights of productivity with Dell Precision M6300 mobile workstations featuring Intel Core 2 Duo Extreme Edition processors. "I asked Dell for new notebooks based on our current models, but Dell came back to me and said 'look, we understand your business requirements, and you need the new Dell Precision,'" says Hammond. "Well, they were right. Our developers are very happy with these models. In the midst of this we also upgraded from Microsoft Visual Studio 2005 to 2008 with great success, and can now use virtual machines on the M6300 to assist with development without any significant performance impact."

"I'm very happy with the Dell Precision M6300," states Chadd Nervig, a contract developer for CyberSavvy Inc. "It's the best mobile workstation I've ever had. One particular solution built in just 10 seconds on the new machine. Previously it would have taken several minutes to build. I run multiple builds each day, and this is really a time saver."

SIMPLIFYING SQL SERVER 2008 UPGRADE TESTING

At Dell's suggestion, CyberSavvy was able to repurpose its former primary storage solution, a Dell PowerVault NX 1950 using the iSCSI protocol, as its new backup repository. Using Symantec Backup Exec System Recovery (BESR) 8 software purchased through Dell, CyberSavvy can now take snapshots of its production server and store them on the NX PowerVault. The images are then restored into an isolated development environment for testing purposes.

"The end result was that we were able to deploy SQL Server 2008 into our development environment from the backup copies of our production system that we burned using the Symantec software," says Hammond. "This was a distinct advantage for us development-wise because when we started our upgrade and development with SQL Server 2008, we were working with an exact copy of production. The results speak for themselves—not a single issue when we upgraded our production servers!"

CUTTING DATABASE DEVELOPMENT COSTS BY 80%

By hiring the best developers and giving them the best tools—and partnering with industry leaders such as Microsoft and Dell—Hammond has been able to stay a step ahead of the competition. As with any business, a major part of that success has been keeping costs down without sacrificing quality.

"Database development costs used to account for more than half our development budget," says Hammond. "Now it's less than 10 percent. That's due to a combination of our own DataPlace solution, SQL Server 2008 and Dell hardware—all working together. The most important thing to me about our partnership with Dell is they understand the complexity we face in technology and business and offer credible solutions for both. Dell's insight has been crucial to our success."

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