

BETTER BUSINESS AGILITY

Dutch software vendor deploys new servers and storage in minutes and consolidates hardware by up to 66 per cent with virtualization



The majority of small to medium-sized enterprises (SMEs) reach a point where continued growth depends on overhauling existing IT systems. The technology that helped them launch is no longer fit for purpose. This is a critical time for SMEs because their new infrastructure will be at the heart of their future success. That's why these companies look for technology that can simplify management, increase efficiency and help drive growth.

SOLUTIONS:

- BACKUP, RECOVERY AND ARCHIVING
- DATA CONSOLIDATION AND MANAGEMENT
- GREEN IT
- VIRTUALIZATION



CUSTOMER PROFILE

COMPANY: 4PS

INDUSTRY: Services & Consulting

COUNTRY: Netherlands

FOUNDED: 2001

EMPLOYEES: 45

WEBSITE: www.4ps.nl

CHALLENGE

IT administrators at 4PS spent too much time managing their storage and server infrastructure. They wanted a highly available environment with simplified management that supported greater business agility.

SOLUTION

Working with Dell Certified Partner Datad, 4PS created an easy-to-manage virtualized infrastructure based on Dell™ PowerEdge™ servers and Dell EqualLogic storage. The solution is backed by Dell ProSupport for IT to maximise performance.

BENEFITS

Get IT Faster

- IT personnel create new storage volumes in minutes with virtualization
- Administrators launch new virtualized servers in under five minutes

Run IT Better

- Virtualized environment consolidates servers by around 66 per cent
- Energy Smart servers reduce power usage by up to 25 per cent
- Effective backup, recovery and archiving keeps data well protected

Grow IT Smarter

- Scalable environment enables cost-effective development



Independent software vendor (ISV) 4PS, based in the Netherlands, builds management solutions for the construction and engineering industry. The company has developed an expertise in Microsoft® Dynamics® NAV technology, which is central to an enterprise resource planning (ERP) system called 4PS Construct. Since launching eight years ago, 4PS has grown significantly year on year because of the success of its products and the rising fortunes of the construction industry in the Netherlands.

Given its development, 4PS faced a number of challenges to keep operations running efficiently and the business expanding. It had out-grown its existing IT infrastructure, which supported day-to-day management as well as customer support services and product development. 4PS found that administrators were spending increasing amounts of time managing data storage. When they did maintenance work on a customer's ERP system, for instance, it often took a couple of hours to create sufficient space on one of the company's tower servers to store client data.

Furthermore, because 4PS followed the computing model of one application per server, it had to purchase new hardware to run new software. This made the whole process of expansion and service delivery costly and often time consuming. Tom Zuijdwegt, development manager at

4PS, says: "To maintain the company's development, we wanted to create an IT infrastructure that would simplify management and deliver maximum performance."

As an SME, 4PS needs to focus resources on driving sales. So, the company wanted an IT solution provider that could offer not only the technology, but the design and project management expertise to deliver the future-proofed infrastructure.



"THE DELL EQUALLOGIC SAN HAS GIVEN US AN INCREDIBLY FLEXIBLE AND SCALABLE SOLUTION WHERE WE CAN PROVISION A NEW STORAGE VOLUME FOR A MICROSOFT DYNAMICS NAV DATABASE IN JUST A FEW MINUTES."

Tom Zuijdwegt, development manager, 4PS

HOW IT WORKS

SERVICES

- Dell ProSupport for IT
 - Mission Critical option

HARDWARE

- Dell™ PowerEdge™ 2950 servers with Intel® Xeon® Processors 5000 series
- Dell EqualLogic PS5000E storage area network (SAN)

SOFTWARE

- VMware® ESX 3.5 server
- Microsoft® Office 2007 suite
- Microsoft Dynamics® NAV
- Microsoft SQL Server® 2005
- Windows Server® 2008
- Windows Server 2003
- Symantec Backup Exec™ 12.5 for Windows Servers

Comments Zuijdwegt: "Having worked with Dell Certified Partner Datad before, we knew it could provide an end-to-end solution that achieved our business goals." The company had purchased Dell laptops and a Dell server from Datad in the past. "The combination of Dell technology and Datad expertise provided a really compelling business proposition," adds Zuijdwegt.

Zuijdwegt provided Datad with an outline of the company's IT requirements and the Dell Partner prepared an architecture design, which 4PS accepted after a few modifications. "The team from Datad understood our business need and was committed to the consolidation project right from the beginning," remembers Zuijdwegt. The Datad design for a virtualized

infrastructure featured Dell™ PowerEdge™ 2950 servers with Intel® Xeon® Processors running VMware® ESX Server software. This created an environment that is easy to manage and powerful enough for the most demanding applications. The design also featured the virtualized Dell EqualLogic PS5000E virtualized storage area network (SAN).

Datad technicians deployed the infrastructure at the 4PS offices and showed personnel how to operate the new technology. Comments Zuijdwegt: "The Dell Partner managed the project well. All the equipment arrived on site in one shipment and the deployment went smoothly, following the agreed timeframe."

“THE BLEND OF EQUALLOGIC AND SYMANTEC TECHNOLOGY PROVIDES PEACE OF MIND THAT OUR DATA IS WELL PROTECTED.”

Tom Zuijdwegt, development manager, 4PS



PERSONNEL ALLOCATE STORAGE IN MINUTES INSTEAD OF HOURS

Now that 4PS has virtualized storage, personnel can allocate space for internal applications or customer databases quickly. Using a simple web-browser interface and wizard tool, administrators can create virtual pools of storage, which they can expand effortlessly to meet demand. “The EqualLogic SAN has given us an incredibly flexible and scalable solution where we can provision a new storage volume for a Microsoft Dynamics NAV database in just a few minutes. Having virtualized storage saves money because we don’t need to buy physical disks every time new storage is needed. This has also increased our responsiveness to clients. We are in a better position to complete urgent customer requests because we can create storage space for their systems so easily. The technology also helps us avoid under-utilization or over-provisioning,” confirms Zuijdwegt.

SINGLE-PRICED SAN ENSURES EXCELLENT BACKUP, RECOVERY AND ARCHIVING

The SAN integrates seamlessly with Symantec Backup Exec™12.5 for Windows Servers, which provides comprehensive disk and tape backup and recovery support for Windows-based environments. In the case of 4PS, the Symantec solution also includes the Agent for VMware Virtual Infrastructure, which helps the company protect and recover its virtual machines and their data. “The blend of EqualLogic and Symantec technology provides peace of mind that our data is well protected,” comments Zuijdwegt. The company performs back-ups every night, following a disk-to-disk-to-tape methodology. “The performance of our SAN and Symantec architecture is excellent – the system runs itself,” confirms Zuijdwegt.

The IT director believes the SAN’s single-pricing model is a major asset. “The idea of EqualLogic storage was very attractive from a cost perspective because there are no additional licensing fees,” comments Zuijdwegt. “The fact that snapshotting and cloning capabilities are included with the

storage was very important. We regularly create temporary and test servers and like to keep copies of the servers’ files and directories.”

NEW VIRTUALIZED SERVERS UP AND RUNNING IN UNDER FIVE MINUTES

The Dell PowerEdge servers and VMware are the final piece in a high-performance virtualized environment that is maximising the company’s growth potential. “Thanks to our virtualized server environment, administrators can launch virtual servers in less than five minutes and then immediately allocate storage volumes on the SAN. In addition, we can run multiple operating systems on a single machine, ensuring greater flexibility,” says Zuijdwegt.

A major advantage of having a virtualized infrastructure is that administrators can dynamically move servers between physical machines. So, if they need to carry out any maintenance work or create more space on a server, they can do so without causing downtime.

"Our virtualized Dell environment featuring VMware and EqualLogic technology provides the business agility that an SME needs to maintain growth," says Zuijdwegt.

SERVER INFRASTRUCTURE IS CONSOLIDATED BY AROUND 66 PER CENT

By introducing VMware, 4PS has reduced the number of physical servers from eight to three. The three rack servers, along with the SAN, take up just a small part of one 42U server rack. "Being able to situate the complete Dell server and storage infrastructure in one place has helped make management easier," says Zuijdwegt.

The company has 15 virtual machines running on the three servers. These include an email server, domain controller and file and print services. 4PS has virtualized its internal Microsoft Office 2007 suite, as well as customer-facing environments based on Microsoft Dynamics NAV, Microsoft SQL Server® 2005, and Windows Server® 2003 and Windows Server 2008. "The mix of VMware running on Dell machines has created a virtualized environment that delivers excellent performance," comments Zuijdwegt. "We have an end-to-end solution based on industry-standard tools that scales easily and will support 4PS for the next five years."

POWER CONSUMPTION REDUCED BY UP TO 25 PER CENT WITH ENERGY SMART TECHNOLOGY

The consolidated infrastructure based on Dell Energy Smart PowerEdge servers has cut power usage. "We could have reduced energy consumption across the infrastructure by as much as 25 per cent¹," believes Zuijdwegt. Dell has designed its Energy Smart servers to deliver outstanding performance, reduced operational costs and excellent efficiency. Standard features include Dell

low-flow fan technology, which controls fan speeds based on thermal requirements, and efficient power supplies, which maintain cooler internal temperatures. Furthermore, the servers include the latest Intel Xeon Processor technology to minimise power draw. "In my experience, Intel processor technology delivers excellent reliability, making it ideal for an energy-efficient virtualized infrastructure," says the IT director.

SCALABLE INFRASTRUCTURE PROTECTED BY RESPONSIVE SERVICES

The company has gained a scalable environment that is protected by Dell ProSupport for IT. Because the infrastructure is crucial to the company's operations, 4PS chose the Mission Critical support option with four hour on-site service. Dell designed the Mission Critical service for server and storage environments where avoiding unplanned downtime and reducing recovery windows are a must. "We have the backing of Dell ProSupport for IT to ensure the infrastructure continues to deliver maximum performance," concludes Zuijdwegt. "We are confident of ensuring maximum uptime with the support package we have in place."

For more information on this case study or to read additional case studies, go to www.dell.com/casestudies and www.dell.nl

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¹ According to 4PS's own data.

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