

ADVANCED TECHNOLOGY

Hi-tech Swedish firm saves up to SEK200,000 a year in hardware costs from virtualized storage and servers

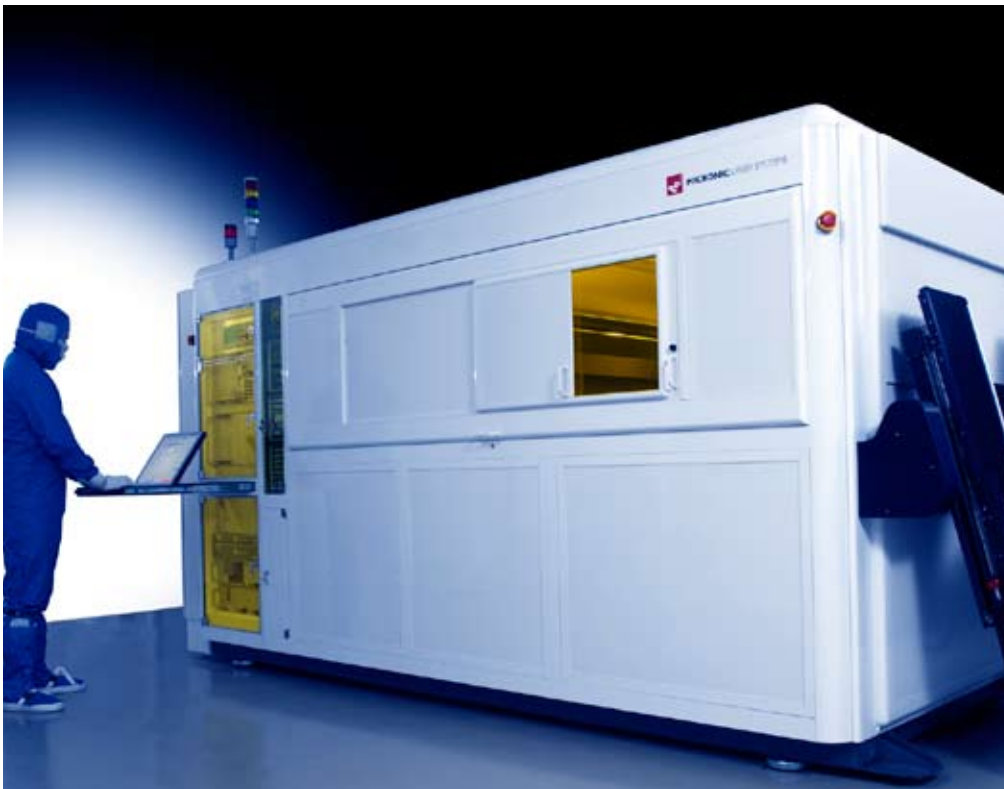


Photo: Pål Allan

Companies want to overhaul the way they store data, so administrators don't have to be storage experts to tackle basic management and can add extra capacity easily to keep pace with demand. To meet the challenge, new storage technologies are now available that simplify IT and help administrators deliver just enough storage – just when it's needed.

SOLUTIONS:

- DATA MANAGEMENT AND CONSOLIDATION
- VIRTUALIZATION



CUSTOMER PROFILE

COMPANY: Micronic Laser Systems AB

INDUSTRY: Technology

COUNTRY: Sweden

FOUNDED: 1989

EMPLOYEES: 357

WEBSITES: www.micronic.se

CHALLENGE

Micronic Laser System's existing data storage solution could not deliver the simplified management and scalability the company needed to cope with the year-on-year growth in data.

SOLUTION

A new virtualized infrastructure comprising Dell storage area network technology is delivering simplified data management that can be scaled easily to meet demand.

BENEFITS

Get IT Faster

- New Dell EqualLogic SANs are deployed and running in minutes
- IT personnel gain telephone access to SAN developers in hours to help answer questions

Run IT Better

- Simplified management increases productivity among the IT team
- Virtualized storage and servers save up to SEK200,000 (US\$24,150) in hardware costs
- iSCSI connectivity saves the cost of fibre-channel cabling

Grow IT Smarter

- Scalable SAN technology delivers 'just enough' storage 'just in time' basis



Micronic Laser Systems, based in Sweden, saw demands for data storage continue to rise. The company manufactures laser pattern generators for the production of photomasks – an important component in the production of LCD flat-screens, computer displays and semiconductor circuits.

Micronic's systems are becoming increasingly sophisticated, with a single design file for a photomask containing hundreds of gigabytes of data. Says Niklas Tegström, IT director of Micronic Laser Systems: "With the design data, logs from our technology in the field and data from our line-of-business systems, I reckon we must be generating up to two terabytes a year."

The challenge for the company was storing design data along with data from line-of-business systems and email in a way that was simple to manage and easy to scale year on year. The existing storage area network (SAN) was complex to handle and expensive to expand. The SAN's underlying systems and tools were overly complicated for Micronic's five-strong IT team. "Not everyone in the team knew how to manage the storage, so we paid for training and consulting on how to operate and manage the SAN," says Tegström.

The IT team couldn't make a business case for developing the current storage environment, so the company requested proposals for a new storage solution from leading IT solution providers. Dell proposed its range of Dell EqualLogic SANs as a suitable replacement for the system already in place. "The big advantage of the Dell EqualLogic solution was it simplified IT management and delivered low-cost scalability," says Tegström.



Photo: Victor Bratt/Global Reporting

"WE HAD OUR NEW DELL EQUALLOGIC SAN UP AND RUNNING IN MINUTES AND CONNECTED TO OUR VIRTUALIZED SERVERS."

Niklas Tegström, IT director, Micronic Laser Systems

HOW IT WORKS

HARDWARE

- Dell EqualLogic PS5000E
- Dell EqualLogic PS5000XV
- Dell™ PowerEdge™ 1955 servers

SOFTWARE

- Microsoft® Windows Server® 2003
- Microsoft SQL Server® 2005
- Linux®
- Progress
- MySQL®
- Oracle®
- VMware® ESX 3.5 server

SERVICES

- Dell ProSupport for IT
 - Mission Critical option

Micronic is a long-standing customer of Dell. The company's IT backbone is standardised on Dell servers, many of which run VMware® virtualization technology. Its virtual servers run Linux® and Microsoft® Windows Server® 2003 operating systems, several design applications, the line-of-business enterprise resource planning system and a range of applications such as Microsoft SQL Server® 2005, Oracle®, Progress and MySQL.

"Dell has always been responsive to our needs and understands our business well. In this instance, we liked the fact that Dell offered locally based technicians, who were able to speak to us directly about EqualLogic SAN technology," says Tegström.

Micronic ordered a Dell EqualLogic PS5000E and the advanced Dell EqualLogic PS5000XV SAN. Both delivered virtualized internet small customer system interface (iSCSI) storage with simplified administration and seamless scalability. Says Tegström: "Dell EqualLogic SAN technology met the different demands of our two storage pools. The PS5000XV provides the high I/O required for the active data, which supports our designers and day-to-day business operations. The entry-level PS5000E supported our archive data, where the I/O speeds are less demanding."

SIMPLIFIED SAN STORAGE IMPLEMENTED IN MINUTES

Because the PS5000 series is quick and easy to implement, the IT team at Micronic did the installation work. "We had our new Dell EqualLogic SAN up and running in minutes and connected to our virtualized servers," remembers the IT director. At the same time as implementing the SANs, the team also upgraded the virtualization software to VMware ESX Server 3.5. By the end of the day, the company had a Dell simplified IT infrastructure, delivering all key business systems, which comprised Dell™ PowerEdge™ 1955 blades running the upgraded VMware connected to the EqualLogic storage.

EXCELLENT MANAGEABILITY, FLEXIBLE STORAGE CAPACITY

A major advantage of the new Dell EqualLogic solution is that every member of the small team can easily manage the solution. Micronic avoids the need to pay for any training, and crucially everybody in the group feels confident enough to work unassisted with the storage system. "The virtualization technology in Dell EqualLogic SANs has simplified the management of our storage infrastructure," says Tegström. "Thanks to thin provisioning with our Dell EqualLogic SAN, we don't have to estimate how much storage to allocate. We can allocate space on a 'just enough' and 'just in time' basis."

As a result of the system's iSCSI functionality, Micronic has been able to connect a number of servers to the storage devices without the need for fibre-channel cabling. "The iSCSI feature of our Dell EqualLogic storage has saved us money because we can use our local area network infrastructure to reach our servers rather than installing fibre-channel connections," comments Tegström.

He adds: "One of the most important features of the Dell EqualLogic storage solution was its flexibility. We can add the amount of storage that we want, avoiding under utilisation."

The company is now planning to deploy another Dell EqualLogic solution as part of a proposed disaster-recovery site. "Micronic likes the simplicity of the Dell EqualLogic SAN

technology and the fact there are no additional licensing costs, helping us stabilise our IT budget for the next few years."

VIRTUALIZED INFRASTRUCTURE SAVES UP TO SEK200,000 A YEAR

By virtualizing servers and storage, Micronic is making significant savings on hardware. The company currently has 45 non-physical servers running VMware ESX 3.5 server. The five physical machines supporting these servers are connected to the Dell EqualLogic SANs. "By upgrading to the latest VMware ESX server software, I reckon we have gained an increase of 10 per cent for our virtualized environment," says Tegström.

He continues: "Our objective is to continue consolidating our physical servers into the VMware and Dell EqualLogic SAN environment. Thanks to our virtualized environment, we are saving up to SEK200,000 a year."

RESPONSIVE SERVICES MAXIMISE PERFORMANCE

Ever since Micronic first started using Dell servers, the technical assistance from Dell has been excellent, helping ensure the IT infrastructure delivers optimal performance. The company has Dell ProSupport for IT Mission Critical with a four-hour on-site service. Comments Tegström: "We are very satisfied with Dell ProSupport for IT. At times, we have worked with Dell engineers, who have helped us gain the most from our IT infrastructure."

According to the IT director, the current support from Dell is as good as it's ever been. Micronic has always had an excellent relationship with Dell support services and we expect this situation to continue," he says.

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