

# GREENER AND LEANER

Food ingredients giant estimates that it will shed two thirds of power costs and comes out greener with large-scale virtualization solution



Global food and household goods manufacturers face a constant challenge in sourcing ingredients that enhance the quality, functionality and life-span of their products, as well as being sustainably produced and available on time.

#### SOLUTIONS:

- DATA CONSOLIDATION AND MANAGEMENT
- GREEN IT
- MIGRATION
- VIRTUALIZATION

#### CUSTOMER PROFILE

**COMPANY:** Danisco

**INDUSTRY:** Food ingredients

**COUNTRY:** Denmark

**FOUNDED:** 1989

**EMPLOYEES:** 9,500

**WEBSITE:** [www.danisco.com](http://www.danisco.com)

#### CHALLENGE

Food ingredients company Danisco found that running and cooling 250 servers at its main data centre was a drain on power and costs. The IT team wanted a simplified infrastructure that would be less expensive and greener to run, as well as scalable for future needs.

#### SOLUTION

On the advice of Dell's consultants, the IT team chose to replace the 250 servers with 10 Dell™ PowerEdge™ servers, virtualized with VMware® and supported by a Dell/EMC storage area network (SAN). The company is now well on the way to saving two thirds on power and shrinking its CO<sub>2</sub> footprint significantly.

#### BENEFITS

##### Get IT Faster

- Project implemented in four months, to plan and within budget
- New servers can be added in minutes<sup>1</sup>

##### Run IT Better

- 250 servers replaced by 10
- Power costs projected to be cut by two thirds over three years
- CO<sub>2</sub> footprint vastly reduced
- Anticipated lower total cost of ownership (TCO)

##### Grow IT Smarter

- Highly scalable server/storage infrastructure

1. According to Danisco's own data

Denmark's Danisco, one of the world's leading producers of food ingredients, enzymes and bio-based products, is an important supplier and partner to these manufacturers.

Every second ice cream and cheese product, every third box of detergent and every fourth loaf of bread produced around the world has an ingredient made by Danisco.



Staff at the company's Copenhagen datacentre – the backbone of an IT network spanning 47 countries with hardware supplied almost exclusively by Dell, including around 800 servers and 10 storage systems – help to make sure that the food ingredients giant delivers on its promises to customers.

Looking to reduce the datacentre's running costs, IT infrastructure manager Rasmus Winther knew that a vastly reduced number of servers would need much less power for running and cooling.

He was also aware that lowering the power consumption of the Copenhagen server infrastructure would play an important part in reducing Danisco's CO<sub>2</sub> footprint at a time when the company wanted to become greener.

On top of these major benefits, a smaller server estate with less hardware and software would reduce total cost of ownership (TCO) for Danisco. In other words, the infrastructure would be more cost-effective in the long term because fewer servers would need to be repaired or replaced.

With this in mind, Winther and his team invited long-term supplier Dell and several competitors to bid for a solution that would use virtualization to reduce the number of physical servers at the Copenhagen site significantly.

**“WITH THE DELL SOLUTION, WE FORECAST THAT THE COPENHAGEN DATACENTRE WILL REDUCE ITS POWER CONSUMPTION BY 1.2 MILLION KILOWATT-HOURS (KWH), OR TWO THIRDS, OVER THE NEXT THREE YEARS.”**

Rasmus Winther, IT infrastructure manager, Danisco

Danisco chose to accept a bid by Dell's solutions consultants, who recommended replacing Danisco's 250 servers in Copenhagen with just 10 Dell™ PowerEdge™ R900 servers, some of Dell's highest performing servers optimised for virtualization. Each of the R900 servers have a 128 gigabyte RAM capacity and together they would allow the IT team at Danisco to run up to 300 virtual servers with VMware® ESX server software.

Underpinning the solution, a Dell/EMC CX3-40 storage system was chosen for its high performance, capacity and scalability, making it ideal for Danisco's growing business.

Though Dell had supplied Danisco with its IT solutions for over six years, Winther had not

previously invited Dell consultants to design a solution as well as deliver and install its components and provide training to Danisco IT staff.

“It was the first time that we made use of Dell's Global Infrastructure Consulting Services (GICS) and they surprised us in a very positive way. Their technical competence was impressive,” says Winther.

The solution was implemented over the course of four months with a smooth migration to the new infrastructure, conducted initially by Dell's consultants, but with a gradual hand-over to Danisco's own IT staff. According to Winther, no significant downtime or delays were experienced by the 7,000 global IT users within Danisco throughout the migration.

## HOW IT WORKS

### HARDWARE

- Dell™ PowerEdge™ R900 server
- Dell/EMC CX3-40 storage area network (SAN)
- Brocade Fibre Channel Switches

### SOFTWARE

- VMware® ESX server software
- Dell OpenManage 5.0

### SERVICES

- Global Infrastructure Consulting Services (GICS)
  - Assessment, design and implementation
- Asset Recovery & Recycling
- Dell ProSupport Enterprise-Wide Contract (EWS)
  - Mission Critical



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Rasmus Winther, IT infrastructure manager, Danisco

An extensive global Dell ProSupport Enterprise-Wide Contract (EWC), which includes a dedicated Dell service delivery manager, gives Winther and the IT team peace of mind. And by choosing Dell’s Asset Recovery & Recycling service, the IT team has made sure that Danisco’s previous hardware has been securely disposed of and recycled wherever possible.

In time, once the company makes full use of all the features of its virtual IT solution, Winther hopes to reap many other benefits for IT staff and Danisco end users. “If you are clever about running a virtualized infrastructure, you should see a number of benefits such as increased uptime in your systems. It is also easier to add extra resources to a virtual platform,” says Winther.

The Dell infrastructure is highly scalable, allowing Winther and his team to add or

remove servers and storage easily, in line with Danisco’s future needs.

“In the past we had to order, configure and prepare physical servers. We always had to keep a number of servers ready – for whenever staff at Danisco needed to start a new project,” says Winther.

Now, virtual servers can be launched in minutes with a few mouse clicks<sup>2</sup>.

#### **POTENTIAL TWIN BENEFITS OF CUTTING COSTS BY TWO THIRDS AND GOING GREEN**

Winther emphasises that the project was primarily a cost cutting exercise for the IT department – with the added benefit of helping the company reduce its CO<sub>2</sub> footprint.

On both counts, the arguments for Dell’s virtualization solution were overwhelming. “With the Dell virtualization solution, we forecast that the Copenhagen datacentre will

reduce its power consumption by 1.2 million kilowatt-hours (KWh), or two thirds, over the next three years,” says Winther.

He says that Danisco expects to save approximately as much money again in the long term, as the cost of keeping up the hardware and software is lowered, significantly reducing the TCO for Danisco.

What’s more, Winther expects Danisco to free up staff resources because management of the virtual infrastructure is simplified and maintenance is easy and fast. This is positive for Danisco, as Winther will be able to channel the extra resources into IT projects that are more valuable to the business.

For a company that – along with most of its peers – is constantly looking for ways to lower its CO<sub>2</sub> emissions, the twin benefits of going green and saving money were persuasive.

<sup>2</sup>. According to Danisco’s own data.

## **EXTENSIVE GLOBAL SUPPORT SAVES TIME AND GIVES PEACE OF MIND**

Getting the Dell support package right for Danisco was a high priority for Winther. As a dynamic international business with hardware spread across many different sites outside the Danish headquarters, the company was looking for standardised global support.

Today, as part of its extensive Dell ProSupport Enterprise-Wide Contract (EWC), Danisco has a dedicated, global Dell service delivery manager (SDM) who proactively liaises with the company's IT team. The SDM responds to issues as they arise, tracks support in individual countries, takes action to help prevent future problems and keeps the company informed about new Dell services.

Winther and his team have tailored the Dell ProSupport Enterprise-Wide Contract (EWC) to meet Danisco's specific needs, choosing the speed of response and level of protection that best suits the company. For example, as part of the Mission Critical option, Winther has specified that on-site support must be provided within just four hours, when required by Danisco at any of its global sites\*.

Winther has also specified the basic troubleshooting that will have been carried out whenever one of Danisco's IT employees contacts Dell with a technical problem. This speeds up the call and helps Dell's support staff find a solution more quickly.

Winther describes the overall support relationship between Danisco and Dell positively. "We are extremely satisfied with the support we receive from Dell," he says.

## **SECURE DISPOSAL ASSURED WITH ASSET RECOVERY & RECYCLING**

As part of the infrastructure project, Winther and his team chose to make use of Dell's Asset Recovery & Recycling service.

As a result, the 250 servers from the previous infrastructure were collected by Dell technicians, who removed all identifying tags and labels and ensured that the hard disks were overwritten to help protect the company against loss of confidential data. In return, Danisco received a resale value for the servers.

Dell's assurance to Danisco that reusable components will be recycled rather than sent to a landfill site offers further support to the company's green agenda.

"The Asset Recovery & Recycling service was convenient for us, because it meant that we did not need to worry about how to dispose securely of the hardware," says Winther.

**For more information on this case study or to read additional case studies, go to [www.dell.com/casestudies](http://www.dell.com/casestudies) and [www.dell.dk](http://www.dell.dk)**

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