

# GOING FOR A GLOBAL SOLUTION

Simplified IT architecture with virtualization cuts total cost of ownership by eight per cent at metal tools manufacturer



Global companies with multiple sites and disparate IT environments often spend considerable time and money on basic infrastructure maintenance. Teaming up with a one-stop global solutions provider is a step in the right direction: reducing the number of servers and storage systems can help companies simplify their infrastructure and cut cost.

## SOLUTIONS:

- DATA CONSOLIDATION AND MANAGEMENT
- GREEN IT
- VIRTUALIZATION



## CUSTOMER PROFILE

**COMPANY:** Kennametal GmbH

**INDUSTRY:** Manufacturing & Logistics

**COUNTRY:** Germany

**FOUNDED:** 1938

**EMPLOYEES:** 14,000

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

## CHALLENGE

Global metal tools manufacturer Kennametal was running out of processing power and its multinational IT infrastructure was expensive and time consuming to maintain and support.

## SOLUTION

Kennametal chose virtualized Dell™ PowerEdge™ servers and Dell storage for sites worldwide. It secured maximum uptime for the solution with Dell ProSupport for IT Mission Critical.

## BENEFITS

### Get IT Faster

- Purchase decision time cut from one week to a few hours through standardisation
- New servers launched in hours rather than weeks

### Run IT Better

- System management time reduced by 15 per cent
- Number of physical servers cut by approximately 80 per cent
- Power cost and carbon footprint reduced
- Total cost of ownership down by eight per cent

### Grow IT Smarter

- Solution easily scaled to meet needs for five years

The Dell logo, which is the word 'DELL' in a stylized font with a diagonal slash through the 'E', set within a circular frame.

Metal tools manufacturer Kennametal has grown fast since its foundation in the US in 1938, acquiring new customers and subsidiaries year on year. As a leading supplier of metal tools to car manufacturers, aerospace producers and other industrial companies, Kennametal had growing needs for IT processing power. But with 731 servers split between 170 sites in 60 countries, IT costs were already high, and Kennametal was committed to reducing carbon emissions.



The IT team – Kennametal Shared Services – relied on multiple support contracts with different suppliers, so repairs were difficult to organise and resolution times were slow. As a result, employees often experienced disruptions to the service. Flexibility was restricted, because any member of staff needing a server for a new project had to wait weeks for a physical machine to be ordered, delivered and configured. Maintenance work had to be scheduled after hours to avoid downtime, which affected the work/life balance of IT staff. What's more, server replacements were a constant headache, because Kennametal lacked a homogenous solutions strategy. This meant that whenever a server reached the end of its lifecycle, the IT team had to identify and order a replacement solution, which took an average of one week.

To tackle these challenges, the IT team decided to standardise the IT platform on server and storage technology that was supported globally and incorporated virtualization software.

Kennametal piloted an infrastructure based on Dell, whose products had supported the company well in the past. The team asked Dell Global Infrastructure Consulting Services (GICS) to propose a standardised virtualization model that could be rolled out worldwide.

## “WE EXPECT TO SAVE 15 PER CENT ON MANAGEMENT TIME THANKS TO THE SIMPLICITY OF OUR DELL SOLUTION.”

Roland Foerster, manager of European IT-services, Kennametal

After working with Kennametal to assess the company's needs, Dell proposed a modular server solution that could be installed at any site – production, sales or back-office. This consisted of two Dell™ PowerEdge™ 2900 servers and one PowerEdge 1950 backup server, all with Intel® Xeon® Processors and running VMware® ESX server virtualization software. The servers would be combined with different models of Dell storage and Dell PowerVault™ tape libraries, according to whether the site was small, medium or large.

As part of the pilot project, Kennametal asked Dell to deploy the following solutions in Germany:

- Essen (large site): replace eight physical servers with three virtualized Dell PowerEdge servers, supported by an existing Dell/EMC CX300 storage system. Install a Dell PowerVault ML6020 tape library for backup.

- Friedrichsdorf and Mistelgau (medium sites): replace six physical servers with three virtualized Dell PowerEdge servers, supported by a Dell AX4-5 fibre channel storage array. Install a Dell PowerVault TL2000 tape library for backup.
- Lichtenau (small site): replace six physical servers with three virtualized PowerEdge servers, supported by a Dell PowerVault MD3000 iSCSI storage system. Install a Dell PowerVault TL2000 tape library for backup.

Dell technicians carried out the implementation in one month. Kennametal's IT team scheduled migration outside working hours, taking advantage of the fact that Dell resources are available at any time. Dell completed the migration within one weekend per site, and the IT team received VMware training through Dell Education Services.

### HOW IT WORKS

#### HARDWARE

- Dell™ PowerEdge™ 2900 and 1950 servers with Intel® Xeon® Processors
- Dell AX4-5 storage array
- Dell PowerVault™ MD3000i storage array
- Dell PowerVault ML6020 tape library
- Dell PowerVault TL2000 tape library

#### SOFTWARE

- Dell OpenManage™ Systems Management 5.0
- VMware® ESX server software
- VMware vCenter

#### SERVICES

- Dell Global Infrastructure Consulting Services (GICS)
- Dell Education Services
- Dell ProSupport for IT – Mission Critical

# “ORDERING, CONFIGURING AND INSTALLING A PHYSICAL SERVER TOOK WEEKS IN THE PAST. NOW, WITH OUR VIRTUALIZED DELL INFRASTRUCTURE, WE USE VMOTION TO LAUNCH NEW SERVERS IN MINUTES, AS AND WHEN OUR ENGINEERS OR DEVELOPERS NEED THEM.”

Roland Foerster, manager of European IT-services, Kennametal



Roland Foerster, manager of European IT-services at Kennametal says: “We wanted a single partner who could take our project and run with it, from design through implementation to after-sales support. Dell was that partner.”

Following the successful German pilots, Kennametal decided to deploy the solution at every site when existing servers reach the end of their lifecycle. The team chose to ensure maximum uptime for the solution with Dell ProSupport for IT Mission Critical with a four hour on-site response time.

## **ENERGY COSTS REDUCED AS SERVER COUNT FALLS BY APPROXIMATELY 80 PER CENT**

Kennametal Shared Services estimates that virtualization will cut the company’s physical server count by approximately 80 per cent. In turn, this will significantly reduce energy consumption, helping the company meet its targets for lower carbon emissions.

Thus, the company was able to reach two targets at the same time: reducing power consumption and cutting its number of physical servers. It also chose Dell PowerEdge 2900 and 1950 servers with Intel Xeon Processors that optimise processing power while minimising

energy use. PowerEdge servers are built using Dell Energy Smart technology that can help reduce unnecessary power consumption.

## **SIMPLIFIED SOLUTION CUTS MANAGEMENT TIME BY 15 PER CENT**

With Dell OpenManage™ Systems Management 5.0, the IT team can monitor and troubleshoot the entire server infrastructure from a single console. “We expect to save 15 per cent on management time thanks to the simplicity of our Dell solution,” says Foerster.

As a result, the IT team has extra time for developing future projects. Because Dell OpenManage raises IT issues before they become problems or result in downtime, the IT team administers the network more proactively and schedules maintenance work well in advance. What’s more, the team can use VMware vCenter to move workloads dynamically between physical servers, which means it can carry out tasks during the working day without disrupting staff. This avoids the need for after-hours work and improves the IT team’s work/life balance. Moreover, it increases uptime for Kennametal employees, which gives them a better user experience.

## **PURCHASE DECISION TIME CUT FROM ONE WEEK TO A FEW HOURS**

With a standardised infrastructure, Kennametal Shared Services can replace redundant servers quickly, because the time that Foerster and his colleagues spend contacting different suppliers has been reduced considerably. This simplifies the purchasing process and speeds up delivery of new hardware. “It used to take us about a week to research and finalise hardware purchase orders. Thanks to our global solutions model from Dell, it now takes just a few hours,” says Foerster.

All the IT team has to do before placing an order with Dell is to classify the size of the site in question. Also, because there are fewer machines to maintain, the IT team can keep to scheduled replacement cycles, as opposed to the constant replacements necessary in the past.

## **SIMPLIFIED ARCHITECTURE CUTS TOTAL COST OF OWNERSHIP BY EIGHT PER CENT**

Overall, Kennametal expects significant financial gains from switching to virtualization. “We estimate that our simplified Dell architecture will lower our total cost of ownership by eight per cent,” says Foerster.

# “HAVING DELL AS OUR SINGLE POINT OF CONTACT FOR SUPPORT SAVES US A LOT OF TIME AND HASSLE. NOW, WITH PROSUPPORT FOR IT MISSION CRITICAL, JUST ONE CALL ENSURES ON-SITE SUPPORT WITHIN FOUR HOURS.”

Roland Foerster, manager of European IT-services, Kennametal

Kennametal bases this overall estimate on expected budget savings on hardware, power, maintenance, management and support.

## NEW SERVERS CAN BE LAUNCHED IN HOURS RATHER THAN WEEKS

With Dell's virtualization solution, the IT team can respond more quickly to demand for new servers from Kennametal's employees. "Ordering, configuring and installing a physical server took weeks in the past. Now, with our virtualized Dell infrastructure, we use VMotion to launch new servers in minutes, as and when our engineers or developers need them," says Foerster. This helps the IT team provide a better service to end users. In turn, employees have greater flexibility and can be more productive.

## SCALABLE SOLUTION MEETS NEEDS FOR FIVE YEARS

Kennametal's virtualized architecture can be expanded easily according to need. "Dell has designed our virtualization solution to be highly scalable, so we can concentrate on pushing our growth agenda forward over the next five years, rather than becoming weighed down with technology issues," says Foerster.

Even when the PowerEdge servers reach capacity, extra physical machines can be added easily and cost-efficiently. Likewise, extra memory can be added to the storage solutions. This means that Kennametal has an infrastructure to meet its requirements

for the next five years, maximising return on investment and minimising the need for modifications as the business grows.

## PEACE OF MIND WITH GLOBAL ONE-STOP SUPPORT

It was important for Kennametal to find a solutions provider that offered complete post-sales support covering both hardware and software. "Having Dell as our single point of contact for support saves us a lot of time and hassle. Now, with ProSupport for IT Mission Critical, just one call ensures on-site support within four hours," says Foerster. At the same time, Kennametal has peace of mind that Dell is able to support the solution globally, as it is rolled out across the company's 170 sites.

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.ch](http://www.dell.ch)

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