

# Monks & Crane transforms ERP performance with IBM Power Systems



*NIS and IBM support successful migration of key legacy systems to AIX 6.1*

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## Overview

### The need

Monks & Crane's ERP system is at the heart of its 24/7 business. With a server that was reaching end-of-life, the company needed to upgrade in order to boost performance and maintain vendor support.

### The solution

NIS and IBM successfully migrated the ERP system onto an IBM® Power® 720 server running AIX® 6.1 – one of the first times such a migration had been attempted in the UK. New storage, cabling and a new UPS were also installed.

### The benefit

Improved end-of-day batch performance by 70 percent and end-of-period performance by 60 percent. Reduced backup times by 50 percent. Reduced risk by aligning with IBM's operating system support strategy.<sup>1</sup>

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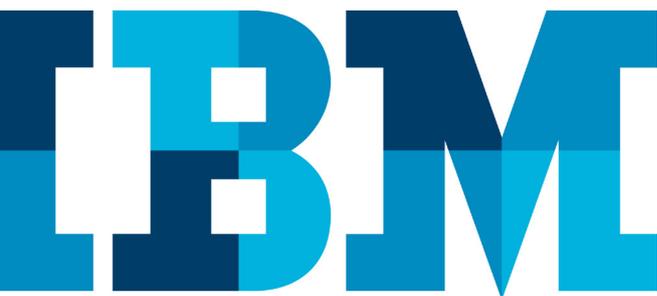
Monks & Crane is a specialist UK distributor of engineering and industrial tools and consumables. Part of the Würth Group, it employs around 240 people. One of the keys to the company's success is its ability to offer next-day delivery on all standard product lines, which it fulfils through a network of 16 branches across the UK and a national distribution centre located in Birmingham. With more than 150 years of history in the industrial sector, Monks & Crane has built a strong reputation and is a preferred supplier for many of the UK's leading engineering companies.

## Customer service depends on IT

To meet the high levels of service that its clients expect, Monks & Crane needs to deliver the right products to the right customers at the right time. To achieve this, the company relies on its IT systems – and especially on its core ERP system – a legacy application which the company has run for many years on servers from the IBM Power Systems™ family.

Until recently, this application and a number of auxiliary systems had been running in an IBM AIX 5.3 environment on an IBM System p630 server. The server was reaching end-of-life, and IBM had announced that the version of AIX would soon reach the end of its contractual support period. To avoid the business risk of running such an important system on an unsupported operating system, Monks & Crane knew that it would have to move to a new platform.

“The main driver for the project was to get the ERP system onto an operating system that would give us access to continued support from the vendor,” says Finbarr O’Keeffe, Head of IT at Monks & Crane. “But we also saw the project as an opportunity to significantly improve the performance of the whole environment.”



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## Solution Components

### Hardware

- IBM® Power® 720
- IBM System Storage® DS5020
- IBM System Storage TS3100 tape drive
- Eaton PW9155 UPS

### Software

- IBM AIX® 6.1

### Services

- IBM Global Financing
- IBM Global Technology Services®: Site and Facilities Services

### IBM Business Partner

- Network Integrity Services
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## An opportunity to improve performance

Improving performance was important because the old server was beginning to struggle to complete the company's end-of-day batch process within the available overnight window. Any overruns would have caused disruption for users; and if the batch process had ever failed, there would not have been enough time to re-run it. To mitigate this risk, the IT team spent considerable time tuning and optimising the batch process, which distracted their attention from other important tasks.

Tape backups were also a slow process, and Monks & Crane was concerned that restoring data for disaster recovery purposes would take a significant amount of time. The company's disk storage system was aging and due for replacement. Finally, the move to new hardware would require an upgrade of the power supply and cabling in the company's data room.

## Finding the right partner

"It was time for a re-think of the whole infrastructure that supported our AIX environment," explains Finbarr O'Keeffe. "We knew the project would be a significant challenge, so it was important to choose the right partner for the job."

In addition to the complexities of the hardware deployment, Monks & Crane needed to move the ERP application from AIX 5.3 to AIX 6.1 – a migration that, to Monks & Crane's knowledge, had never been attempted in the UK before.

"We needed a partner that understood our ERP application and also had the right skills with IBM Power technologies," states Finbarr O'Keeffe. "It proved to be a very rare combination: Network Integrity Services [NIS] was the only company we found that ticked both boxes, and since we had worked with them on a number of previous projects, we were confident that they were the right choice."

## Managing a complex project

The first phase of the project was to implement a new uninterruptable power supply (UPS) and re-cable the data room. NIS brought in a team from IBM's Power Systems server division to assist with this initial phase, which involved significant upgrades to the electrics of the whole room. The result was a data room capable of supporting both the existing and the new hardware in parallel – a key requirement for the success of the migration.

While the first phase was being completed, a new IBM Power 720 server was delivered to the NIS data centre for testing. NIS took a copy of Monks & Crane's ERP system and began testing it on the new server. Two scenarios were tested: first, migrating to an AIX 5.3 environment on the new server and then upgrading to AIX 6.1, and second, moving directly from AIX 5.3 on the old server to AIX 6.1 on the new machine.

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*“NIS and IBM really delivered the whole package on this project – data centre infrastructure, hardware, software, services, disaster planning and financing. The ability to deliver such a complex project with just two partners was a major advantage.”*

— Finbarr O’Keeffe, Head of IT, Monks & Crane

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Mustaq Chandia, a Director of NIS, comments: “This is a truly business-critical system for Monks & Crane, so it was really important to test not only the ERP application itself, but also all the interfaces with other systems. Although the application vendor had advised that moving to AIX 6.1 would probably require software changes, we were delighted to discover that this wasn’t necessary: the application actually runs very well on AIX 6.1, and our benchmarks showed that the performance increase from running on POWER7 processors would be significant.

“Besides a few minor issues – for example, AIX 6.1 required an upgrade of all the printer drivers – the whole testing phase went very smoothly and gave us a lot of confidence that the migration would be a success. As a result, Monks & Crane were happy with our recommendation that we should move straight onto AIX 6.1 on the new server.”

### **A seamless switch-over**

The next stage was to install the Power 720 server, together with a new IBM System Storage DS5020 disk system and an IBM System Storage TS3100 tape drive with auto-loader, in Monks & Crane’s data room. The new infrastructure was run in parallel with the old server and storage until the migration itself took place.

“We had originally intended to perform the switch-over during a weekend, but we were so happy with the results of the test phase that we decided to do it on a week-night instead,” comments Finbarr O’Keeffe. “We picked a quiet evening just before Christmas and completed the move with no problems and no disruption. When the users came to work the next morning, they didn’t even notice!”

### **Faster batch processes**

What the company did notice was the difference in batch processing performance: the new infrastructure delivered an immediate 70 percent improvement in overnight batch runs, as well as a 60 percent improvement in end-of-period batch runs. Moving from LTO2 to LTO5 tape drive technology has also accelerated backups and restores by 50 percent.

Mustaq Chandia comments: “The performance Monks & Crane has seen is almost exactly in line with what our benchmarks predicted, which is really heartening. It’s great when a system in the real world performs as well as it does in the lab.”

Finbarr O’Keeffe adds: “The POWER7 processors in the new server have improved performance dramatically, and the DS5020 storage system contributes too, because our ERP system is very I/O intensive. We’re saving about seven hours each night on the main batch process, which means that if something goes wrong, we have time to re-run it without disrupting our users the next day. Equally, we don’t have to spend any time on tuning the performance of the batch process, so our IT team can focus on other objectives.

“A further advantage is the increased energy efficiency of the new server and storage landscape. When we have retired our old infrastructure, we will reduce power consumption by around 20 percent, which should hopefully translate to a similar reduction in our data room electricity costs.”

## Reducing the financial impact

NIS also helped Monks & Crane ease the financial impact of the project by introducing them to IBM Global Financing. As a member of the Würth Group, Monks & Crane had a number of attractive financing options available in-house, but the IBM Global Financing offer of a zero percent rate offered unbeatable value.

Finbarr O’Keeffe concludes: “NIS and IBM really delivered the whole package on this project – data centre infrastructure, hardware, software, services, disaster planning and financing. The ability to deliver such a complex project with just two partners was a major advantage. As a result, we now have a platform that will support our business-critical systems for several years to come – and we have proved that our core ERP application has a viable future on the IBM Power platform. We hope that other companies will follow our lead and help us build a strong user community on AIX 6.1.”

## About Network Integrity Services

Network Integrity Services aims to provide simple, cost-effective technology solutions to everyday business needs.

NIS is a specialist AIX and Windows end-to-end solutions provider, offering a wide range of services from technical implementation and support through to disaster planning, cloud services and server consolidation expertise.

To learn more about products, services and solutions from Network Integrity Services, visit [www.nis-it.co.uk](http://www.nis-it.co.uk) or email [sales@nis-it.co.uk](mailto:sales@nis-it.co.uk)



NETWORK INTEGRITY SERVICES

## For more information

To learn more about the benefits of IBM Power servers and IBM AIX, contact your IBM sales representative or visit [ibm.com/power](http://ibm.com/power)



<sup>1</sup> All performance statistics mentioned in this document are based on Monks and Crane’s individual experience. In other environments, results may vary.

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Produced in the United Kingdom  
April 2012

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