



REFERENCE

REIFF-Group

Modernization of IT Infrastructure for Global Trade Operations

Background

The REIFF Group is a family-owned trading company rich in tradition, headquartered in Reutlingen, Germany. It maintains 19 trading companies with approx. 80 sites in Germany, Europe, Morocco and China. The group's core business is focused on trade with technical and elastomer engineering products. Apart from REIFF's trading companies for technical products — REIFF Technische Produkte GmbH, REIFF Technische Produkte China, Roller Marokko and Kremer GmbH, and REIFF's own elastomer manufacturing operation R.E.T. REIFF Elastomertechnik GmbH, the group is also successful with its REIFF Management & Service business unit. The IT systems enabling sales via the group's brick-and-mortar outlets and various online stores were in need of a tech refresh, an opportunity seized upon by the company to completely overhaul and modernize its IT infrastructure. REIFF's goals: security, reliability, scalability, simplified complexity, and reduced administrative overhead. In addition to introducing new IBM hardware, Axians' Dynamic Power Cloud Manager (DPCM) has proved a particular boon, providing for a convenient, user-friendly automation solution for the IBM Power environment.

Project Requirements & Goals

A large share of the REIFF Group's tire business is already transacted online: the group serves as a wholesaler in the background and supplies online tire vendors. The systems for the company's own user groups are available from a central location: this was enabled by an IBM Power7 solution. Yet REIFF's three server systems (two p770's and one p740) and its storage area network (SAN), featuring two V7000 systems from IBM's Storwize family, had reached their performance limits. Capacity bottlenecks were the order of the day whenever new SAP systems or their release updates were installed. The group's growth and technological development meant that its IT infrastructure had reached its end of life. This prompted Axians' IBM experts to develop a seamless approach for upgrading REIFF's environment to the IBM Power8 processor generation.

For years REIFF has relied on Axians' Dynamic Power Cloud Manager (DPCM) for administering its infrastructure. Thanks to DPCM, admins are able to simplify all the functionality and management tasks involved with the virtual servers (LPARs) for the IBM Power systems under AIX, IBM i, Linux and SAP HANA.

TASK / OBJECTIVES

- Modernize the IBM Power environment
- Reduce maintenance costs
- Security, reliability, scalability, simplified complexity, and reduced administrative overhead

SOLUTION

- Seamless upgrade to IBM Power8 processor generation in ten workdays
- Deployment of Axians' Dynamic Power Cloud Manager (DPCM), an automation and admin tool for IBM Power environments
- Hardware solution: four IBM Power S822 units, two IBM Storwize V5020s, SAS and SSD harddisks, IBM Easy Tier technology, four new SAN switches, DPCM from Axians

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The Power admins at REIFF use this “Swiss army knife” to primarily administer SAP workloads and database systems (e.g. Informix DB). The “capacity planning” featured in Axians’ DPCM aided in designing the future IT environment. The roadmap was quickly drawn. Not only the legacy systems were replaced: the tech refresh also included adding another server system to complement the three existing ones and replacing the old storage area network (SAN) with new Storwize units.

Implementation

Axians designed a solution that distributes the workload among four symmetrically equipped IBM Power S822 server systems. The SAN storage is realized by way of two IBM Storwize V5020s, making for a virtualized hybrid storage solution. The combined use of SAS and SSD hard disks and IBM’s Easy Tier technology enables data to be migrated automatically among various storage levels based on real-time analysis process patterns. The SAN design remained unchanged for the most part — including host-based mirroring.

This principle means that the servers assume the job of synchronously mirroring the data on the other (mirror) storage site. Four new SAN switches form two fabrics for the redundant link between the server and storage systems.

vSCSI mapping (or mapping the LUNs to the client logical partitions (LPARs)) in a shared environment with multiple Dual VIO server installations generally requires considerable effort. However, the DPCM facilitates optical disk mapping drastically while employing best practice rules for a redundant and performant link. This also applies to the reverse process, since after migration the discarded V7000 had to be restored step by step.

In order for REIFF to benefit from a performance boost prior to migration, Axians put a loan machine into operation before installing the new IBM Power8 environment. The Axians experts quickly shifted part of the workload to this server system using DPCM, thus taking a significant load off the existing environment.

BENEFITS TO CUSTOMER

- Simple and intuitive management of complex IT environment enabled by DPCM
- Enhanced performance
- Cost savings thanks to flexible maintenance of IBM Power machines
- Integrated recreate function: increased availability of systems made simple and quick in the event of disaster recovery
- Downtimes during an AIX update reduced by up to 70 %
- Customer’s staff can be instructed on the system in a minimum of time without having to acquire deep expertise



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Project Outcomes

Axians succeeded in modernizing REIFF's IBM Power environment in the space of ten working days. The four Power machines can now be maintained and serviced much more flexibly and economically. The DPCM admin and automation tool enabled the migration effort for the Power8 platform to be cut by two thirds. The Power tool also provides for a host of benefits in operation: "Most of today's IBM Power environments are rather complex. Our Dynamic Power Cloud Manager enables this complexity to be hidden from view. This means that an admin needn't deal with every bit and byte, but rather has a neat and tidy GUI at their fingertips," says Ralf Stein, Principal Consultant for IBM Power Systems at Axians.

The IT department makes a backup of the Power environment of each machine once a week. DPCM automates the process, rendering the result as an easy-to-read graphic. The admin quickly gets the message: "Backup successfully completed."

When a machine requires maintenance work (e.g. firmware update or replacement of components by a tech), the Global LPM feature provides for an efficient method to clear a machine, meaning scheduled downtimes of applications are avoided. DPCM supports the OS updates of the LPARs by integrating various NIM-based update procedures (e.g. nimadm). The GUI simplifies handling significantly, enabling the downtime during an AIX update to be reduced by up to 70 %.

Internal IT must provide LPARs wherever a new application is to be provisioned on IBM Power. Thanks to DPCM, this couldn't be easier for REIFF's admins. Their colleagues in the other departments can use the new SAP systems immediately. Release, update and product testing is assumed by test machines that are installed via DPCM in an encapsulated environment (sandbox).

The IBM Power8 solution now runs at REIFF in a performant manner, providing for sufficient reserves as needed. The admins do capacity planning via the DPCM, which records server utilization, identifies areas of growth, and provides the data required to generate a prognosis. However, another DPCM feature generally attracts all the attention: "Users across all industries value DPCM's disaster recovery scenarios. These scenarios maintain the LPAR data of the entire environment in a database. If an environment goes down due to fire, flooding, power outage or other reasons, the platform can be quickly restored via the recreate feature," says data center expert Ralf Stein. This is reassuring, as is the fact that Axians successfully reduced the deployment time for an IBM Power project at REIFF substantially.

In the IBM Power server area, maintenance costs have also been cut substantially by switching from enterprise to scale-out systems.

CUSTOMER BRIEF



Company: REIFF Group
(REIFF Management & Service GmbH)

Sector: Trade & commerce

Headquarters: Reutlingen, Germany

Founded: 1910

Facts & figures: The REIFF Group is one of Germany's leading family-owned trading companies. Its strength lies in service: it offers its customers a comprehensive range of technical products and individual solutions meeting industrial requirements. REIFF Management & Service is the REIFF Group's internal service provider for its operative units.

Web: www.reiff-gruppe.de

AXIANS IN GERMANY

Axians in Germany is an agile corporate network of specialised ICT service providers and software manufacturers under the VINCI Energies global ICT brand Axians. Direct proximity to customers is achieved through a comprehensive presence in 24 cities. The network guides its customers – private sector firms, local authorities, public institutions, network operators and service providers – throughout the entire ICT process chain. The core expertise of IT solutions, IT security, network infrastructure and network technology is supplemented by the company's own industry software, supporting customers for all requirements of core ICT and the digital transformation. By combining consultation, implementation, service and operation, customers can exploit technologies and applications appropriately, optimise processes and realise their digital business strategies sustainably. With 1,700 specialists, Axians in Germany can respond to every challenge with a customised solution and the best team from the network.

YOUR CONTACTS

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