REFERENCE

HUK-COBURG Insurance Group

Taking Control of Highly Virtualized IBM Power Environments

Background

HUK-COBURG is one of Germany's ten largest insurers, serving over eleven million customers with a combined team of approx. 10,000. Its portfolio is primarily targeted to customers in the private sector, with a focus on liability, accident, property and legal expenses insurance, in addition to private health, life and annuity products. HUK-COBURG is also Germany's largest insurer of public sector workers (3.5 million) and motor vehicle insurer, providing cover for over ten million vehicles.

The number of transactions generated by the group is sizable: the various departments within the group – especially the representatives and agents who come into contact with customers – are dependent on a failsafe IT environment. The growing complexity of the group's system environment prompted the need to efficiently manage a rapidly increasing number of virtualized environments: at stake here was maintaining the high standard of service level agreements (SLAs) and amending them in line with changed requirements.

Project Requirements & Goals

The IT resources for the specialists in HUK-COBURG's ten subsidiaries run in an IBM Power environment. AIX, a proprietary UNIX operating system developed and sold by IBM, runs on an enterprise UNIX platform.

Over the years this infrastructure has morphed into a giant, highly complex IT landscape. An exceptionally high degree of virtualization has been achieved on a small number of physical machines, far beyond the norm. The ongoing adaptation of configurations by HUK-COBURG's IT experts has not only required the utmost care, but also exacting expertise in terms of the group's infrastructure, posing a potential hazard for smooth, trouble-free operation. Just one false adjustment may cause not only a few but many or even hundreds of highly consolidated systems to fail.

In order to make these demanding admin tasks easier, and also reduce the sources of error and satisfy the needs of the technical departments under the various SLAs, HUK-COBURG looked for a new solution to manage its system.

TASK / OBJECTIVES

· Improved automation of HUK-COBURG's IBM Power environment to enable streamlined administration
· Reduced error potential in IT management
· Immediate provisioning of IT resources — from VMs to server systems
· Improved protection for the worst-case scenario and securing a high level of availability of IT systems

SOLUTION

· Introduction of Axians' Dynamic Power Cloud Manager (DPCM), an automation and admin tool for IBM Power environments
· Adaptation of DPCM functionality to specific user requirements, e.g. in the backup–restore scenario for VMs

HUK-COBURG Insurance Group

By increasing the degree of standardization, the IT landscape was to be simplified in admin terms so that the virtualization and running-in of hardware could be done in a minimum of time. Extended waiting times are a non-starter — also for customers. When a policyholder calls to report a claim, the claims case worker has to be able to pull up the customer's records on screen immediately. If the system is down, the caseworker can't provide any information. In order to prevent this and further improve customer service, HUK-COBURG had an extended disaster recovery capability introduced.

Implementation

With its Dynamic Power Cloud Manager (DPCM), Axians offers a management and automation solution for IBM Power-based systems ranging from a two-machine environment to a farm providing hosting services. Operated via a web front-end, this intuitive admin tool was showcased by IBM at the IBM Power Symposium.

For the sysadmins at HUK-COBURG, DPCM and its features for standardizing automation sounded like the magic bullet they had been looking for to facilitate the management of HUK-COBURG's complex IT environment. Here system administration extends to automated image deployment, load monitoring and balancing, and built-in high availability. Automation not only includes the deployment of system images but the internal operating processes of the entire system administration as well.

After a painstaking selection process and evaluation phase, HUK-COBURG decided in favor of a proof-of-concept (PoC) installation — albeit with a number of peculiarities. Axians didn't set up a standard test environment but rather implemented specific features like back-up / restore processes for virtual machines (VMs). After a two-month PoC and running-in phase, Axians embarked on installation in the production environment that, including staff training, took four days.

"In terms of the number of VMs, physical machines and resulting integrated systems, the installation at HUK-COBURG was one of the largest we've ever mastered," says Sebastian Luckau, Senior Consultant for IBM Power Systems, who can look back on a track record of 60 successful implementation projects.

HUK-COBURG started off with version 1.4 of DPCM. Since then, Axians has integrated updates on a regular basis and enabled new features to be introduced. Currently, the latest version 1.7 is installed — an indication of HUK-COBURG's satisfaction and a sustainable client relationship.

Project Outcomes

In day-to-day business, HUK-COBURG's IT department primarily uses DPCM to create VMs, as well as administer them and back them up. If VMs need more RAM, CPU or hard disk space, this can be addressed quickly and easily. If technical departments require additional IT services, they receive them without delay subsequent to authorization of a requisition order. Also, relocating systems is now a routine exercise: thanks to DPCM's GUI the complex architecture is no longer visible. For the first time there is a logical separation of the system environment on the underlying hardware.

BENEFITS TO CUSTOMER

- Simple, intuitive management of a highly virtualized enterprise Unix platform translates into cost savings
- IT staff can concentrate on other, more pressing tasks
- Operations staff can also be acquainted with the system within a minimum of time without having to acquire deep expertise. The requisite IT resources can be provided to users upon process release. Stable system operation is supported.
- Adherence to SLAs for the technical departments
- Integrated recreate function: increased availability of systems made easy by way of on-click handling in the event of disaster recovery
- Management distributed among more IT staff since less specific knowledge of the architecture is required
- Instruction and training of new IT operations techs is facilitated

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HUK-COBURG Insurance Group

"A system-wide outage is precluded for all intents and purposes since our solution standardizes admin and always implements a best practice configuration," emphasizes DPCM core developer Sebastian Luckau. If the worst-case scenario should occur for other reasons, the recreate function quickly restarts the systems. Only DPCM masters this in this form for IBM Power environments. Plus which, the IT team needn't have in-depth knowledge of the enterprise UNIX platform. Operations staff can also be acquainted with the system in a minimum of time without having to acquire deep expertise.

The server system is on the whole extremely stable, and IT operations exceptionally efficient, from which the technical departments benefit. The DPCM admin tool stabilizes and secures HUK-COBURG's business far and beyond the solution itself: last year, it enabled a weak spot in system operations caused by vendor-induced changes in the architecture to be resolved.

Sustainability

During the past three years, a mutual sustainable relationship has evolved that extends far beyond the implementation of DPCM. The working relationship between Axians and HUK-COBURG also includes consulting and engineering services for the enterprise UNIX platform.

In joint exchanges between the two, it was shown that the proprietary monitoring system of the IBM Power system environment needed to be rethought through by HUK-COBURG's IT department. The solution that had been deployed needed to be adapted to state-of-the-art exigencies and work environments. This would not only have been extremely time-consuming but costly as well, so the time had come to take a look at a

new solution. It turned out that while attending to the product maintenance of DPCM version 1, Axians had been working on a fundamentally new version of its Dynamic Power Cloud Manager in which the monitoring functions are an essential integral element. Axians and HUK-COBURG embarked in tandem upon an early support program (ESP) for this new solution, the DPCM Monitoring Edition (DPCM-ME).

Since the autumn of 2016, highly-granular performance data of all components in the IBM PowerVM-based system environment has been collected by the installed DPCM-ME management node. This data forms the basis for monitoring and graphical processing in the application node on which the DPCM developer team has been working with the utmost urgency.

The collaboration in this ESP is held in high regard by both sides since HUK-COBURG's IT department has a decisive impact on the development of the DPCM-ME and Axians' DPCM developer team is able to thoroughly test the new version in a representative customer environment (test and production environment) during the development phase.

The DPCM-ME is the basis of the new version with the code name of Snow Grouse. The current management node component of DPCM-ME has already been integrated in DPCM version 1.8. The next milestone of DPCM-ME will feature the beta version of the application node sporting the new, radically revamped DPCM web frontend.

CUSTOMER INFO

HUK-COBURG

Company: HUK-COBURG Insurance Group

Sector: insurer serving private households and public-service employees

Site: Coburg, Germany

History: HUK-COBURG is a mutual insurance company with a long, rich history that has followed Germany's political changes and history of motorization. The company's origins date back to when two motor vehicle associations serving two groups of public-sector workers, the church clergy and teachers, founded a mutual motor insurance provider in Erfurt in 1933.

Web: https://www.huk.de

ABOUT AXIANS

Axians in Germany is an agile corporate network of specialist ICT service providers and software vendors under the VINCI Energies global ICT brand Axians. Direct proximity to customers is achieved through a comprehensive presence in 24 cities. Axians' network serves its customers – ranging from private-sector companies and local governments to public-sector institutions, network operators and service providers – throughout the ICT process chain. Axians' core competencies – comprised of IT solutions, IT security, network infrastructure and systems expertise – are supplemented by its proprietary sector software, enabling Axians to serve customers in all their core ICT and digital transformation needs. Thanks to Axians' artful combination of consulting services, implementation, after-sales support and operation, customers are able to optimally avail themselves of technologies and applications to specification and implement future-proof digital business strategies. With its 1,700 specialists, Axians is able to provide an individualized solution to meet any challenge by putting together a team from its network.

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