Hewlett Packard Enterprise

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RIsolution
RI-Solution Data GmbH

Objective
Improve performance and scalability of one of the world's largest SAP retail systems

Approach
Migrate a large, mission-critical SAP retail application from UNIX to an x86 architecture and Linux

IT Matters
- Improved infrastructure flexibility by deploying SAP retail applications and SAP HANA on different hard partitions within the same Superdome X enclosure
- Increased application response times up to 33%
- Standardized infrastructure to streamline IT operations

Business Matters
- Contained costs while increasing capacity and performance
- Future-proofed the SAP environment for growth by building a scalable server infrastructure
- Increased business agility by moving to an open systems architecture

RI-Solution modernizes its SAP environment and improves response times by up to 33%

Moves to HPE Integrity Superdome X Server and relies on HPE Technology Services Consulting to optimize SAP infrastructure

RI-Solution deployed two HPE Integrity Superdome X Servers running Linux to consolidate and standardize its hardware infrastructure, contain costs, increase availability, simplify business processes, and improve the performance of its mission-critical SAP applications.

RI-Solution GmbH is the full-service IT provider for the BayWa AG, a global business focused on trading, logistics, and services in the agriculture, energy, and construction sectors. By far the largest of BayWa's applications is its SAP Central Retail Information System.

Due to BayWa's size and the impressive breadth of its global offerings, the organization relies on highly repeatable processes and solutions. Hundreds of BayWa retail locations depend on the company's centralized retail application, which is based on the SAP retail branch solution and utilizes the IBM DB2 database. RI-Solution automates many critical operational processes through a high level of system integration, and the workflows within BayWa assume that this

> "By migrating our SAP retail application to HPE Integrity Superdome X Servers, we have successfully migrated to open systems x86 platforms running Linux and increased application response times up to 33%."
>
> – Eugen Berchtold, Managing Director, RI-Solution

retail system is always available—otherwise the flow of goods offered by BayWa worldwide would slow down.

This mission-critical SAP retail system demands an infrastructure offering high availability and reliability, as well as fast response times. It was previously running on two HPE Superdome 2 Servers at full capacity, and the company wanted to migrate it to standard x86 platforms to optimize its IT infrastructure.

Migrating to open systems

The company had previously turned to Hewlett Packard Enterprise in 2008 to migrate SAP Business Warehouse Accelerator (BWA) from IBM infrastructure as part of a modernization initiative, and in 2013 HPE migrated the organization's SAP business intelligence applications onto SAP HANA on an HPE ConvergedSystem appliance to improve performance.

RI-Solution wanted to operate its business-critical SAP systems more efficiently but without compromising the reliability they enjoyed with their previous infrastructure. In addition, IT management needed to respond to the significantly increasing demands on their systems, yet maintain operating cost levels over the long-term. Because of the enterprise focus on highly repeatable processes and solutions, RI-Solution sought to standardize applications on x86 architectures running the Linux operating system.

RI-Solution needed a platform with the compute power and performance to support business growth. At the same time, because its SAP installation is vital for business operations, the organization also needed the availability and resiliency of a mission-critical system. Choosing the right platform for mission-critical workloads is always a major challenge, and RI-Solution selected HPE Superdome X Servers for this essential application. The HPE Superdome X Server

has proven to be an excellent fit because it is designed from the ground up to deliver the highest levels of uptime and is therefore ideal to support critical workloads.

The company wanted a flexible and standard environment that could support mission-critical SAP applications and deliver real-time business data analysis while meeting cost-efficiency objectives. Because they offered the performance, availability, resiliency, and scalability the company required in a standard x86 compute platform, RI-Solution selected Superdome X Servers to run its mission-critical SAP retail application.

Improving IT operations

HPE Technology Services Consulting helped RI-Solution to migrate into two new datacenters and deploy two Superdome X platforms running the SUSE Linux Enterprise Server 11 Service Pack 3 in a redundant configuration, with one server in each of two datacenters.

Each server has identical configurations, with four HPE BL920s Gen8 Server Blades. Two server blades at each location are used for production, one is used for further quality assurance and testing purposes and the fourth is used for a SAP HANA proof-of-concept. The production applications run on the primary server, with replication to the other server.

RI-Solution uses HPE Serviceguard for Linux as a high-availability and disaster-recovery solution that provides business continuity for critical applications. HPE Serviceguard for Linux monitors the availability of critical resources and applications and provides fast failover to the other Superdome X server in the event of a system failure. Serviceguard for Linux allows RI-Solution to performance maintenance of this cluster infrastructure with almost zero downtime. HPE Data Protector software is deployed for backup and recovery, and RI-Solution has created three nPar electrically isolated hard partitions in each of the two Superdome X Servers. RI-Solution is able to monitor and control all hardware resources using a single console via the HPE Systems Insight Manager.

Optimizing SAP resources

The migration from Superdome 2 to Superdome X was managed by HPE Technology Services Consulting, which helps organizations like RI-Solution to increase infrastructure efficiency and agility. RI-Solution also relies on HPE Datacenter Care Support to improve availability and performance so it can continuously increase stability and reduce unplanned downtime. In addition, RI-Solution utilizes HPE Datacenter Care Support to support the deployment and offer expertise on automating its infrastructure and optimizing SAP applications.

The port of the SAP retail application and DB2 database successfully went live with no expected downtime, and it is currently supporting over 8,000 users wordwide. Since migrating to x86 servers and Linux, the retail application has remained highly reliable. Because RI-Solution is only using half the resources of the Superdome X Servers, management is evaluating options for consolidating SAP HANA and other SAP applications onto it to further streamline IT operations.

Customer at a glance

Hardware
- HPE Integrity Superdome X Servers
- HPE BL920s Gen8 Server Blades

Software
- HPE Serviceguard for Linux
- HPE Data Protector
- HPE Systems Insight Manager
- SUSE Linux Enterprise Server 11 Service Pack 3

HPE Services
- HPE Technology Services Consulting
- HPE Datacenter Care Support

RI-Solution is fulfilling its goal of standardizing on x86 architectures running Linux and developing reproducible repeatable management and administration procedures. Application response time has improved up to 33%, and RI-Solution has increased business agility and gained greater flexibility to respond to application demands.

"We are running our mission-critical SAP retail system on DB2, along with a proof-of-concept of SAP HANA on the same server. Superdome X support for hard partitions enables us to deploy both environments in the same server enclosure. That flexibility was a compelling benefit that led us to select the Superdome X for our mission-critical SAP applications," says Andreas Stibi, Head of IT of RI-Solution.

By deploying the Superdome X Servers, RI-Solution has quadrupled its available compute capacity at the same cost as if it had expanded its Superdome 2 deployment. While the Superdome 2 Servers were running at full capacity before the migration, moving to the two Superdome X Servers has resulted in RI-Solution now operating at 50% capacity, so there is room in the server to potentially move over more SAP HANA workloads and additional VMs. The migration to Superdome X has resulted in faster performance and greater scalability, and provides RI-Solution with maximum flexibility in optimizing its SAP environment.

Learn more at
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