INTELLIGENT DATA PLATFORM ACCELERATES SOFTWARE DEVELOPMENT AND TEST FOR OPTIMAL SYSTEMS

HPE 3PAR, HPE Nimble Storage bring reliable performance to global teams

Industry
Software development

Objective
Provide reliable high-performance and scalable storage for global software development teams

Approach
Adopt an intelligent data platform built on HPE 3PAR and HPE Nimble Storage managed with global intelligence from HPE InfoSight software

IT matters
• Automatically moves data to optimal storage tier based on demand
• 10X reduction in latency for data access under heavy load
• Streamlines storage administration and support

Business matters
• Accelerates test and development cycles for critical new product offerings
• Assures storage availability to support business demand 24x7
• Supports business strategy to expand market reach globally

Leveraging an intelligent data platform from Hewlett Packard Enterprise, OPTIMAL SYSTEMS has been able to accelerate software development cycles for its market-leading enterprise content management solutions. With HPE 3PAR and HPE Nimble Storage, the company gains reliable high performance, seamless scalability, and intelligence to optimize storage utilization based on business demand.
“Storage is one of the most important components of our infrastructure—it is where critical data sits. Sometimes it has to be scalable to grow quite large. Sometimes performance and latency really matter. With HPE 3PAR and HPE Nimble Storage, we can cover all these requirements with the most cost-effective and efficient solution.”

– Olaf Holst, Chief Technology Evangelist, OPTIMAL SYSTEMS

**With HPE 3PAR and HPE Nimble Storage, OPTIMAL SYSTEMS gets:**

- High performance
- Assured reliability
- Massive scale
- Intelligence

Enterprise content management (ECM) is a crowded, mature market with many well-established players. It takes real vision to stand out in such challenging conditions—looking out beyond traditional product lines and taking a truly global view of what’s possible. Berlin-based OPTIMAL SYSTEMS did just that, and today is one of the top ECM software developers and marketers in the world.

OPTIMAL SYSTEMS already had a solid, feature-rich ECM product that’s been on the market for more than 15 years and is used by more than 2,000 customers across Europe today. But it needed something new that would distinguish OPTIMAL SYSTEMS from its competitors and lead the company to expand business globally. The answer was a new line of products built on microservices to be entirely cloud-native. It was an enormous software development initiative involving numerous teams distributed across Europe—all of which required access to applications and IT resources in the company’s centralized data center in Berlin. Consequently, the demand for storage grew quickly.

A long-time HPE customer, OPTIMAL SYSTEMS runs its infrastructure on HPE BladeSystem compute and HPE ProLiant DL360/DL380 servers. To address the company’s growing storage needs, OPTIMAL SYSTEMS turned to its trusted IT partner, arxes-tolina GmbH, who leveraged its strong relationship with HPE to help expand the company’s storage infrastructure with HPE 3PAR 8200 systems and the HPE Nimble Storage HF40 Adaptive Flash Array.

**BRINGING INTELLIGENT STORAGE TO THE SOFTWARE DEVELOPMENT LIFECYCLE**

OPTIMAL SYSTEMS follows an agile development methodology with multiple projects running in parallel, requiring numerous virtual machines (VMs). Every night, developers submit VMs containing software builds to the central data center for testing and quality assurance. Speed matters at every stage of the software development lifecycle, along with the ability to scale as business demands grow. Moreover, developers and quality assurance teams depend on storage services being available 24x7, making system stability another top priority.

There is yet another vital requirement for OPTIMAL SYSTEMS—the storage must be intelligent. The storage environment needs to anticipate and adapt to changes in workload demand, seamlessly move data where it performs optimally, and provide valuable insights into the performance and health of the storage systems. The combination of HPE 3PAR and HPE Nimble Storage delivers the high performance, assured reliability, massive scale—and intelligence—OPTIMAL SYSTEMS needs for all its workloads.

Jasin Hahne, customer support team leader at OPTIMAL SYSTEMS, says, “In choosing storage for our mission-critical workloads, we evaluated performance, reliability, scale-up possibilities, and support for virtualization. HPE 3PAR excels in all of these areas.”
DELIVERS RELIABLE HIGH PERFORMANCE FOR VARYING WORKLOADS

The HPE 3PAR 8200 systems are configured with a combination of flash and SAS drives, and OPTIMAL SYSTEMS uses HPE 3PAR Adaptive Optimization to automatically move data between the two tiers for optimal utilization of performance and capacity.

Hahne notes, “We have about 200 people working remotely using Remote Terminal Server to access our central data center, so storage responsiveness is important. With HPE 3PAR, users can click on an application icon and get an instant response instead of waiting two or three seconds. So, user satisfaction is a lot higher.”

In fact, Hahne reports that in the past remote users could experience latency of up to 200 milliseconds when the storage array was under heavy load. Since moving to the HPE 3PAR 8200 system, latency has held steady at 10–20 milliseconds.

He also makes another important point—HPE 3PAR provides very predictable behavior. “In situations where the workload is very heavy, we want to know how the storage system will react so we can plan ahead. In the past, we had storage that would just crash if it got overloaded. HPE 3PAR is more resilient and adaptive, so even when we push it to the limit, the system continues to run.”

HPE Nimble Storage complements the HPE 3PAR environment by providing intelligent, fast, self-managing flash storage with the best all-flash capacity per terabyte. OPTIMAL SYSTEMS has software projects in continuous integration/continuous delivery (CI/CD) pipelines that are sensitive to disk latency. HPE Nimble Storage delivered the responsiveness they demand. In fact, during load testing, HPE Nimble Storage never exceeded a latency of 2 milliseconds. Under normal production conditions, latency on these systems ranges 0.5 millisecond.

Olaf Holst, chief technology evangelist at OPTIMAL SYSTEMS, remarks, “Storage is one of the most important components of our infrastructure. Sometimes it has to be scalable to grow quite large. Sometimes performance and latency really matter. With HPE 3PAR and HPE Nimble Storage, we can cover all these requirements with the most cost-effective and efficient solution.”

When it comes to scalability, OPTIMAL SYSTEMS has already more than doubled its HPE 3PAR footprint with no disruption to active services while upgrading the hardware and software. Moreover, the company has not experienced any unplanned system downtime with either HPE 3PAR or HPE Nimble Storage since the systems have been in service.

Hahne points out, “This high degree of uptime plays directly into our need for delivering service to our end users 24x7.”
Customer at a glance

Solution
Enterprise content management infrastructure providing production data storage and a VMware®-optimized storage platform for agile software test and development

Hardware
- HPE 3PAR 8200 Storage
- HPE Nimble Storage HF40 Adaptive Flash Array
- HPE BladeSystem c7000
- HPE ProLiant DL360/DL380 Servers

Software
- HPE InfoSight
- HPE OneView
- HPE Integrated Lights Out
- VMware vSphere®

HPE Pointnext Services
- HPE Proactive Care
- HPE Foundation Care

“HPE InfoSight is quite helpful for capacity planning and driving higher levels of availability. With HPE InfoSight, we see a consolidated view of the entire storage environment including details on utilization trends. We are also contacted proactively about problems, which are then fixed before any issues occur, so there are no negative consequences for our users.”

– Jasin Hahne, Customer Support Team Leader, OPTIMAL SYSTEMS

PREDICTIVE INSIGHTS TO ASSURE OPTIMAL SYSTEM PERFORMANCE

OPTIMAL SYSTEMS leverages the intelligence of HPE InfoSight to simplify management and support of the HPE 3PAR and HPE Nimble Storage environments. By continuously analyzing system behavior and applying machine learning, HPE InfoSight helps the OPTIMAL SYSTEMS IT team stay ahead of potential issues to avoid technical problems that could degrade services for the business, as well as forecast capacity requirements for the future.

“HPE InfoSight is quite helpful for capacity planning and driving higher levels of availability,” Hahne says. “With HPE InfoSight, we see a consolidated view of the entire storage environment including details on utilization trends. We are also contacted proactively about problems, which are then fixed before any issues occur, so there are no negative consequences for our users. That comes back again to helping us deliver high reliability and uptime.”

The IT team also relies on HPE OneView to streamline system administration on the HPE server infrastructure, providing a single pane of glass into the HPE Integrated Lights-Out (iLO) remote server management processor embedded on each server and blade.

“HPE OneView provides a huge benefit when installing firmware updates, helping us speed up the entire process,” Hahne points out. “Prior to HPE OneView, we had to use the service tech CD, which takes about 15–20 minutes to load on each server before any maintenance work can be done. Now we can apply updates to entire groups of servers simultaneously in a fraction of the time.”

For added support, OPTIMAL SYSTEMS also takes advantage of operational services from HPE Pointnext Services. This includes HPE Foundation Care for the blade and server environment, as well as HPE Proactive Care for the storage systems. Hahne notes, “It’s reassuring that someone from HPE is monitoring our systems. We don’t have to worry about detecting a possible disk failure; HPE already knows before we do, and coordinates the repair before there’s any impact on our operation.”

Holst concludes, “OPTIMAL SYSTEMS has developed software technology that is now leading the future of ECM with our native cloud solution. Accelerating innovation and achieving our business goals also depends on having a strong hardware infrastructure with the speed, reliability, and scale our business demands. That is why we value our relationship with HPE. They continue to deliver the leading technical capabilities we need, with intelligent, proactive support solutions to help assure our infrastructure operates at its best 24x7.”

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