

**Objective**

Improve storage performance and scalability while shifting to a proactive, consultative support partnership

Approach

Replace existing SANs and connect storage to HPE remote support to enable periodic healthchecks, rapid diagnoses, and tailored recommendations

IT Matters

- Ensured continued infrastructure reliability
- Optimized storage resources
- Evolved from reactive to proactive storage support

Business Matters

- Avoided additional investments in augmenting legacy storage infrastructure
- Handled peak storage demands during busy periods without additional storage investments

Liverpool John Moores University turns to personalized support

Deploys HPE Storage supported by HPE Proactive Care Advanced Services



By selecting HPE Proactive Care Advanced Service, Liverpool John Moores University has been able to maximize the benefits from its storage investments, implement best practices, maintain peak performance, and control operational costs.

Alongside conducting world-class research, LJMU manages a portfolio of over 300 undergraduate degrees and offers masters and research degrees. Based in the heart of Liverpool, England, the University has a community of over 21,000 students recruited from 100 countries. LJMU is a modern civic university delivering solutions to the challenges of the 21st century, and has been steadily automating business processes and incorporating technology into the educational experience. The university had been relying on five-year old storage area networks (SANs) at each of its two main data centers, but the steadily growing use of technology across the university was placing strains on storage capacity and performance.

“HPE Proactive Care Advanced Service provides us with ongoing analytics to prevent problems as well as consultations with a storage expert who knows our storage requirements and helps us proactively tune our storage resources and analyze our future storage requirement. ”

– Mark Wynne, Assistant Director of IT, Liverpool John Moores University

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Each data center had an HPE StorageWorks 8400 and P6500 Enterprise Virtual Array (EVA) with fibre channel switch fabrics, with inter-site data replication provided by HPE Continuous Access Software and automated failover provided by HPE Cluster Extension Software (CLX).

According to Mark Wynne, assistant director of IT for LJMU, “All of the university’s business goes through our storage infrastructure, and our applications are growing consistently. Our Oracle storage needs were growing particularly fast and delivering an unacceptable user experience. Adding storage capacity to the legacy platforms would be inefficient and wouldn’t scale over time, so we analyzed our storage needs, developed a tender, and reviewed proposals from several storage vendors.”

LJMU also sought to evolve from a reactive approach to storage maintenance and support to preventative services that would include proactive analysis of storage resources, periodic reporting, and expert consultations on storage utilization issues. “We wanted to stop focusing on reacting to storage issues and to start a process for analyzing our storage challenges periodically so we could optimize our storage resources, ensure continued high levels of performance, and gain access to a storage specialist who could serve as an ongoing resource to our skilled internal staff,” Wynne explains.

Refreshing storage infrastructure

After evaluating several proposals, LJMU selected the DTP Group, a UK-based IT solutions and services provider which is an HPE Platinum and ServiceOne Partner. DTP designed a storage refresh based on HPE 3PAR StoreServ 7000 Storage, HPE Proactive Care Advanced Service, and DTP's Design, Installation, Testing, Data Migration, EVA Decommissioning, and Project Management services.

"We recognized the technical and manageability advantages of the 3PAR platform, and appreciated the native functionality for achieving online data migration in an efficient, streamlined, and semi-automated manner," says Wynne. "DTP and HPE also offered a price and performance advantage over competitive bids so we could anticipate a superior return on investment for our storage refresh."

Because the university operates year-round, the refresh had to be implemented in a tight timeframe over the year-end holidays. Wynne says, "We were concerned about the performance of the old hardware during the migration, but DTP migrated all the high-risk data during the quiet period and the migration was completed by the end of January."

DTP deployed an HPE 3PAR 7400 at each of the two data centers, with three tiers of disks: solid-state, nearline, and fibre channel drives. Redundant and resilient SAN fabrics were also deployed at each site, and CLX provides automated failover while replication is enabled using HPE 3PAR Remote Copy Software and the HPE 3PAR Replication Software Suite. To simplify management and backup of several critical LJMU applications, the university also had DTP deploy the HPE 3PAR Application Software Suite for VMware.

LJMU uses the HPE 3PAR Data Optimization Software Suite to pair data to the most cost-efficient storage tier capable of delivering the needed service level, and LJMU also relies on the HPE 3PAR Reporting Software Suite to gather and track historical system information to monitor performance and support efficient storage capacity management.

Becoming proactive

To break the cycle of reacting to storage issues instead of proactively analyzing storage utilization and ongoing requirements, LJMU selected HPE Proactive Care Advanced Service for 5-Years. Flexible and cost-effective, HPE Proactive Care Advanced Service combines support with smart technology to boost performance. HPE experts provide a hands-on approach, providing consultation, recommendations, and reporting to prevent issues and quickly resolve problems.

DTP connected the HPE 3PAR 7400 platforms to HPE so that LJMU could leverage 24x7 monitoring, pre-failure alerts, rapid diagnosis, automatic call logging and parts dispatch for hardware support to help avoid potential performance issues or outages. LJMU receives proactive scans, a healthcheck on its connected devices and tailored recommendations from the assigned HPE account support manager (ASM).

"Every application at the university depends on our storage infrastructure, so we need guaranteed uptime," states Wynne. "Proactive Care Advanced Service provides us with regular insights into the performance and maintenance requirements. We're even alerted when firmware updates need to be deployed, which not only saves our staff members time it also allows us to ensure that we're keeping up with all of the necessary maintenance activities to ensure top performance."

Customer at a glance

Hardware

- HPE 3PAR StoreServ 7440 Storage

Technology Services

- 5-Year HPE Proactive Care Advanced Service

Software

- HPE 3PAR Remote Copy Software
- HPE 3PAR Application Software Suite for Oracle
- HPE 3PAR Application Software Suite for Microsoft Exchange
- HPE 3PAR Application Software Suite for VMware
- HPE 3PAR Data Optimization Software Suite
- HPE 3PAR Replication Software Suite
- HPE 3PAR Reporting Software Suite

The ASM meets periodically with Wynne to review system performance and offer recommendations to help optimize the use of storage resources. “We value having a storage specialist onsite who has come to understand our storage infrastructure and the demands placed upon it,” says Wynne. “We appreciate the continuity, and can turn to the ASM to address special concerns. For example, due to legislated electrical safety concerns we have to power down one of our data centers soon for the first time since the storage refresh and the ASM will be onsite in case we need any assistance. Historically, we’ve only reacted to storage issues but now we work proactively with HPE to analyze storage demands so we can manage them proactively.”

Leveraging access to storage expertise

LJMU receives advance warnings of necessary software upgrades so it can plan downtime in advance if needed, and turns to recommendations from HPE to optimize utilization of service resources. “HPE Proactive Care Advanced Service helps us ensure that our storage infrastructure remains stable and reliable, and HPE notices when performance declines and will often proactively recommend that we make

adjustments to our storage tiers to ensure that we meet our performance goals for each of our applications,” says Wynne. “And by having access to the HPE ASM who understands our deployment, we benefit from expert insights into storage utilization so we can determine the most cost-effective method for optimizing performance for applications instead of just our historical approach of just going out and buying more disks.”

Proactive Care Advanced Service also allows LJMU to dynamically optimize storage utilization to support peak period demands. “We’re now able to look at our business processes and reallocate storage capacity to improve storage performance during busy periods,” Wynne explains. “For example, when university examination results are released we temporarily promote those systems onto the solid-state tier to improve performance. The combination of our IT staff, DTP, and HPE services provides LJMU with a team that works together to proactively achieve common goals to ensure the performance of the applications the university community has come to rely on.”

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