University of Sussex

Education

Use Case
Boost capacity, resilience and performance

Requirement
High-capacity archival, storage and networking solution

Solution
Flexible, scalable, economics

NexentaStor™ + HA Cluster
- Dell R720 servers
- SAS Cards
- Solid State Disks (SSDs)

"With IT infrastructure, the main thing is you don't want to have anything brought to your attention, and since we installed Nexenta there have been no trouble tickets and no reports of performance problems with the file systems, it's just gone as an issue. It's performing absolutely magnificently."

James Goodlet
Head of Infrastructure Services, IT Dept
University of Sussex

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University of Sussex

COMPANY OVERVIEW

Since receiving its Royal Charter in 1961, the University of Sussex has become a leading teaching and research institution. Over 90% of the university's research activity is rated as world leading, internationally excellent or internationally recognized, making it one of the top 30 research universities in the UK.

The single campus university has more than 13,000 students, a third of which are postgraduates, and over 2,100 staff, including 540 teaching and research staff. The university attracts staff and students from over 120 different countries across the world and almost a third of the staff are from outside the UK.

CHALLENGES

The IT department at the University of Sussex provides support for the entire university, its staff and students. To enable the university to manage devices and desktops that use Windows, Mac or Linux, the department provides a single home directory service that allows students and staff to access files from whatever device they are using wherever they are on campus.

This dynamic IT support means that members of the staff can now begin in their office with one device, walk to a lecture with a laptop, access files, deliver their lecture, and pick up where they left off back in their office.

After five years, the original solution was approaching the end of its useful life and the IT department needed to explore new solutions. The department quickly identified NAS UK, a leader in high-capacity archival, storage and networking solutions.

SOLUTION

Working with NAS UK to replace its existing system, the university looked at a number of options including sticking with the incumbent supplier, or switching to other solutions, including Nexenta. After weighing up all the options, Nexenta was selected because of its flexibility, scalability and attractive economics.

James Goodlet, head of infrastructure services, IT services, University of Sussex, explains: "Nexenta was actually the most cost effective but that wasn't why we chose it. We got a really good feel from the company, talked with them extensively and did a thorough evaluation with their support.. They even sent developers on to the campus to talk through some of the issues we saw. We were very impressed with that level of support and feedback. It's unusual to have such an open relationship with a vendor."

The university chose Dell R720 servers which NAS arranged with particular SAS cards and solid state disks (SSDs) to support optimal integration. The resulting solution delivered the performance the university sought, and paved the way for sustainable expansion.

The university has two data centres with 200 physical servers and 200 virtual ones (using VMware). The primary data centre is replicated on an hourly basis to the secondary site. Both are clustered with tiered storage using SAS hard drives and SSDs with 110TB of capacity each. The University of Sussex are also planning an expansion of their Nexenta solution to include another 200TB for HA (High Availability) to support their growing research data warehouse.

BUSINESS BENEFITS

As a result of the stability, scalability and performance of Nexenta, the University of Sussex's IT department is now looking to other campus storage systems and even further opportunities to consolidate, increase speed, and grow efficiently. The Nexenta implementation marks a milestone for the university and a move towards an industry-leading, best of breed software-defined data enterprise that will support the campus, its students and staff now and for the future.

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