

Providing powerful, flexible storage for world-class research.

Lancaster University tapped modern, software-driven Dell PowerStore to support students and researchers campus-wide.



Business needs

The traditional storage that researchers relied on was increasingly complex, difficult to expand and error-prone. The university needed a high-performance, continuously modern storage solution that would accommodate its evolving demands to quicken the pace of research campus-wide and allow researchers to more efficiently collaborate on projects.

Business results



Allows teams to easily collaborate and share research progress and ideas.



Maximizes performance and responsiveness for improved data access.



Meets growing research demands with exceptionally powerful, agile storage.



Reduces energy usage and costs through a sustainable storage footprint.



Can be updated and maintained without disruption to keep projects running.

Solutions at a glance

- [Dell PowerStore](#)
- [Dell PowerEdge](#)
- [Dell PowerScale](#)
- [Dell CloudIQ](#)



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Lancaster University is considered one of the UK's best educational institutions, and is among the top 150 out of 1,000 schools worldwide according to QS Global University Rankings. Located on a 560-acre campus three miles from Lancaster's city center, the university serves approximately 16,000 students enrolled in nine colleges with a faculty and staff of around 4,800.

Lancaster is highly regarded for its world-class research — with more than 90% of projects rated as world leading or internationally excellent. To provide the performance and agility its researchers rely on, the university chose Dell PowerStore.

"We needed a solution that offers flexibility within a high-speed, secure, interconnected environment," says Dr. Matthew Storey, head of storage and virtualization at Lancaster University. "Dell PowerStore delivers continuously modern storage that has a smaller form factor, yet is powerful and agile enough to meet all our research needs."

Bringing it together.

In the past, Lancaster used a traditional storage solution that led to complexity and, all-too-frequently, errors. PowerStore has enabled the university to bring together the activities of various research groups so teams can explore, develop, share and evolve projects in a secure and cohesive environment.

"We looked at other options that combined technologies, required many data connections and consumed quite a lot of power," Dr. Storey recalls. "PowerStore simplifies our storage, providing high performance and continual uptime, so we don't disturb the researchers' work."

PowerStore is specifically built for performance, with dual-port NVMe solid-state drives for uncompromising data throughput and very low latency to meet research demands.

"Our researchers always want more at their fingertips and they want it now," notes Dr. Storey. "PowerStore delivers higher bandwidth with the lower latency they need."

At the same time, PowerStore is simple to manage and highly available — 24x7. Handling block and file storage, it supports traditional and container-based apps, as well as cloud workloads.

"Downtime is greatly minimized," Dr. Storey explains. "We can update or maintain PowerStore without disruption, so researchers can keep longer jobs running during basic maintenance."

Supporting sustainability.

Lancaster declared a climate emergency in 2020 and is committed to be carbon neutral by 2035. To meet its sustainability goals, the university constantly looks for any opportunity to improve, including in its technology investments where it has chosen Dell PowerEdge servers for high performance computing and VDI, Dell PowerScale for storing unstructured data, Dell CloudIQ for proactive health analytics and, of course, PowerStore.

"Our data center is now much more efficient and sustainable," remarks Dr. Storey. "PowerStore has significantly reduced rack space, power and cooling — decreasing our energy usage and costs. In addition, we've got solar, wind turbines and biomass facilities around campus. We're feeding data from building management systems into PowerStore and leveraging AI to analyze this data and provide greater green benefits and savings to the university."

Innovation and future-proofing.

Lancaster is continually evolving its IT infrastructure to meet the university's ever-expanding aspirations, and Dr. Storey describes the process as "painless."

"We simply keep building onto our PowerStore solution," he declares. "It enables us to innovate by easily integrating technologies as requirements change, or by quickly adding and provisioning VMs to accommodate new projects."



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Dr. Storey concludes, “Dell Technologies has been a helpful partner in providing the latest solutions, so we can adapt and enable our researchers to do novel things. We’re also proud of the speed at which we’ve been able to respond, with full working solutions often in place and running by the end of a single weekend.”

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