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Success Stories

Blackpool and The Fylde College Achieves Business Continuity and Saves Cost with NetApp SAN Storage

BLACKPOOL AND THE FYLDE COLLEGE
An Associate College of Lancaster University

Another NetApp solution delivered by:

ALPHA
INTUITIVE DATA MANAGEMENT



KEY HIGHLIGHTS

Industry
Education.

The challenge

Provide one reliable, affordable storage solution to replace local storage attached to more than 100 servers.

The solution

Mirrored FAS3020c and FAS2050c appliances provide centralised storage resources for academic and administrative applications providing full redundancy as well as disaster recovery and business continuity.

Benefits

- Centralised management of storage requirements for over 15,000 users
- Provided additional facilities including full disaster recovery and business continuity by adding a second unit located at the college's new Central University Campus
- Achieved significant savings in management time by migrating local storage from over 100 separate machines to NetApp
- Improved use of a virtualised environment, further reducing management time
- Accelerated provisioning of additional storage by dynamically allocating storage to applications, servers, or users

CUSTOMER PROFILE

One of the largest educational establishments in the country, Blackpool and The Fylde College provides a diverse range of further and higher education programmes—everything from aviation engineering to construction, healthcare, and tourism—for more than 20,000 students. From its new £10 million University Centre in Blackpool, the college delivers a wide range of degree programmes, many of which are validated by Lancaster University. The winner of many prestigious awards, Blackpool and The Fylde College has gained a national reputation for innovation and excellence in learning. Its facilities are some of the best in the United Kingdom and include extensive ICT resources to support the learning achievements of its students.

THE CHALLENGE

Provide a reliable, affordable centralised storage solution

Because the college has four main campuses plus four outreach centres and more than 15,000 active network accounts requiring access to all data and applications, its IT support team manages a complex and demanding technology environment. The college has a strong history of doing its own technical provisioning, rather than outsourcing, because this gives Network Manager Simon Bailey the flexibility to meet the demanding challenges posed by a further and higher education environment.

“About four years ago the college reached the point where local storage on any of

the 100 plus file servers was becoming unmanageable,” says Bailey. “We needed to centralise our storage and provide a SAN (storage area network).”

Bailey and his team set up a procurement procedure to identify what would be the most flexible and useful technology solution to meet the diverse requirements of the college. A key requirement for any system was that it allows the use of multiple operating systems. The college is an established and extensive user of Novell® Netware®, which is gradually being migrated to Novell OES2 for its academic applications. The college's business functions mostly run on Linux® machines with Oracle® Databases. In addition, the college maintains several Microsoft® servers and two Red Hat Linux machines for specific applications.

“Our policy has always been to choose the best operating system for the applications and services we need to provide rather than adopt a standard operating system and hope to deliver all our services,” says Bailey. The college also needed the flexibility to select different disk infrastructures within its SAN. “It was important that whatever we chose could support a combination of high-speed Fibre Channel disks for our mission-critical data and applications, with the ability to use lower-cost SATA disks for the majority of our mainstream data, including user home directories, and for storing student data where storage speed isn't an absolute priority, but resilience and availability are,” Bailey adds.

“The centralised NetApp storage system is flexible, scalable, and affordable—we wouldn’t be without it.”

Simon Bailey

Network Manager, Blackpool and The Fylde College

Bailey received a technical recommendation from peers associated with Salford University to consider the technologies provided by NetApp. With funding for educational establishments at a premium, price and total cost of ownership were key factors. “Whatever we chose not only had to do the job exceptionally well, it also had to provide us with value for money,” says Bailey.

THE SOLUTION

Achieve full redundancy as well as disaster recovery and business continuity using NetApp SAN storage

Following an extensive evaluation against the college’s strict criteria, the college decided that a NetApp FAS3020c with multiple heads for full failover facilities would meet all the college’s initial requirements, providing the 99.999% availability and redundancy that it needed. A formal tender process was then undertaken and the business was won by NetApp Star Partner and virtualisation specialist Alpha. “We weren’t just choosing a SAN,” says Bailey. “We were selecting a partner who would work closely with us, understanding our needs and requirements.”

BUSINESS BENEFITS

Centralised storage management contributes to considerable savings

Flexibility and scalability have been significant factors in the success of the NetApp storage solution chosen for the college. Storage resources are now moved around dynamically in response to changing requirements, which are often frequent and temporary. “For example, if the Art and Design Department suddenly needs a significant increase in storage for a particular

assignment or project, it’s easy to allocate extra space to them without having to go out and purchase more disks,” Bailey notes.

Increasingly, the college makes use of its virtual learning environment called Moodle, an open-source e-learning platform. With the NetApp storage solution and a virtualised server front end, it is now easy to accommodate the multiple requests for extra server and storage resources.

The college has already achieved considerable savings in management time since installing its NetApp storage system. “Previously, we had over 100 servers with attached storage to manage. These were constantly running out of disk space and we were forever trying to cram in extra disk capacity. To be honest, the situation had got past manageable,” says Bailey.

With one central management point, the NetApp SAN has proved its worth. “It’s not for the faint-hearted,” admits Bailey. “However, working with Alpha taught us basic maintenance, and it’s only now, four years and a second appliance later, that we felt the need to visit Alpha for some advanced NetApp training.”

Two years ago, the college was fortunate to secure half a million pounds of funding to redevelop the ICT resources and infrastructure of its second largest site, the University Centre, in the centre of Blackpool. “Part of this funding allowed us to establish a new data centre and a second NetApp FAS2050. Now, we have centralised 99% of our storage,” Bailey relates.

The college currently utilises over 200 virtual servers running on 14 hardware hosts, all pointing at the mirrored NetApp SAN. SnapMirror® is used overnight to back up the contents of each of the appliances across a leased line, giving total redundancy and making the process failsafe, including full disaster recovery and business continuity. “The centralised NetApp storage system has allowed us to implement a scalable data management strategy in line with organisational growth,” says Bailey. “It’s flexible, scalable, and affordable—we wouldn’t be without it.”

SOLUTION COMPONENTS

NetApp products

[NetApp FAS3020 cluster](#)
[NetApp FAS2050 cluster](#)
[NetApp deduplication](#)
[NetApp FlexClone®](#)
[NetApp SnapDrive®](#)
[NetApp SnapManager® for Oracle](#)
[NetApp SnapMirror](#)
[NetApp SnapRestore®](#)
[NetApp Snapshot™](#)

Protocols

[FCP \(SAN\)](#)
[iSCSI \(SAN\)](#)

Environment

[Apple Macintosh](#)
[Oracle Database](#)
[Microsoft Windows Server 2003/2008](#)
[Novell NetWare](#)
[Red Hat Linux](#)
[VMware®](#)

Partner

[ALPHA](#)
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