

CS Case Study



Fayetteville State University: Meeting the Need for Low-Cost Long-Term Storage

Educational institutions generate transcripts and a wide variety of other documents that need to remain available for decades even though they are accessed infrequently. As a result, they end up with an enormous volume of papers that take up rows and rows of shelf space.

To meet its retention requirements, Fayetteville State University mandates that some of its records be kept for as long as 30 years after the individual has left the school. Being the second oldest public university

in North Carolina, it also keeps an extraordinarily high volume of historical documents in its library, which it has just begun scanning for electronic storage.

The University already had 21 terabytes of data stored on disk and had recently purchased another seven terabytes to expand its primary storage capacity. But its IT group was looking for a less costly storage solution, particularly for student records, papers, and historical data that may not be accessed for years at

a time.

Evaluating Alternatives for Long-Term Retention

Fayetteville's Director of Systems and Infrastructure, Joseph Vittorelli, wanted not only a lower-cost solution but also one that, unlike tape, would hold up over a long period of time. His goal was to free up primary storage space while keeping stored documents available when needed.

"I had one of my systems analysts scour the Internet for removable





media archives, and everything out there seemed to be traditional SATA-based hard disk arrays and other spinning disk solutions,” said Vittorelli. “Nothing that was true archive - giving me the option to either leave data online cost-effectively or pull it out, put it away, and leave it alone.”

A More Cost-Effective, Reliable, and Manageable Hybrid Solution

In the end the IT group found that the PowerFile Active Archive Appliance (A3) best met its requirements. The A3’s unique hybrid storage system contains two distinct storage platforms, one for performance and the other for economy, along with an intelligent file system that manages which platform will contain data and when.

“First of all it wasn’t a disk solution and therefore cost less,” said Vittorelli. “It was also a good solution because it didn’t require that we jump through hoops to get our documents archived.”

The A3 will also scale easily and, due to its superior longevity over tape storage, eliminate the need to migrate data every few years. Another important feature for Vittorelli was that PowerFile uses industry-standard Blu-ray media and adheres to the ISO standard Universal Disk Format, giving IT the ability to read its stored Blu-ray disks from any Blu-ray reader on campus.

Now the University can store its valuable records at a far lower cost and still keep any portion of them, such as historical documents, readily available to all users on campus and via the Web. Other records, such as emails, transcripts, and personal documents will be accessible only to a select group of users.

The library’s scanning of historical documents will allow a volume of paper that would reach 36 feet high if standing vertical on a shelf to be accessible to the public in an electronic format and these scanned documents will all be stored on the PowerFile A3.

But that is only the beginning. “We are planning to have PowerFile do an analysis of the entire content in our primary storage to see what isn’t being used and could be archived,” said Vittorelli. By moving fixed content to the less costly A3, the University will not only free up costly primary storage space but reduce backup windows. The A3’s unequaled longevity will also eliminate the need for data migration every few years.

“ It wasn’t a disk solution and therefore cost less. It was also a good solution because it didn’t require that we jump through hoops to get our documents archived. ”

Joseph Vittorelli | Fayetteville State University