



Fort Lewis College Upgrades Storage Environment

Zunesis collaborates with college to rebuild storage infrastructure with greater security, synchronization, and stability



CHALLENGE

When it came time for Fort Lewis College in Durango, Colorado, to update its data storage environment, Parker Jardine, manager of systems administration at Fort Lewis, was determined to make the right purchase at the right time.

"We needed a stable, highly reliable environment that wouldn't require a full-time employee to manage," says Jardine. "We didn't want to have to worry about our storage or our servers, because—let's be realistic—we want to be able to step away, go on vacation, and not be always chasing issues."

Years back, the college established a metro cluster, an architectural design that involves multiple data centers connected by multi-gigabit fiber optic lines. The new system would need to accommodate this structure, and also provide synchronous replication of all data to the college's two primary data centers. "We have a system that uses

two data centers simultaneously," says Jardine. "A lot of other institutions have one active data center and then a secondary data center to which they copy data. But our environment has two active data centers with an additional backup site. Any new storage solution would need to work seamlessly with this setup."



2

Active data centers
synchronously
replicating data.

128
terabytes

stored across
the environment.

60%
growth
capacity

System efficiency and
3PAR Thin Technologies
helps the environment only
use 40% capacity, leaving
plenty of room for growth.

30%
reduction

In time to run daily
ETL processes
due to performance
improvements.

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SOLUTION

A Zunesis senior account manager went to Durango to consult with Jardine. As a result of those consultations, the account manager recommended the HPE 3PAR StoreServ Storage, a hybrid array that could scale up easily.

The solid-state drive and fast-class (10k SAS) drive, Tier 1, hybrid data storage arrays offer a guaranteed 99.9999% data availability, automated provisioning, multi-tenant design, hardware-accelerated deduplication and compression, and sub-1ms latency. Perhaps most significant, 3PAR provides synchronous replication through its Peer Persistence Replication Technology. With this technology, the 3PAR system could write to both of Fort Lewis's

data centers at the same time, providing real-time, synchronized backups.

Zunesis brought Jardine and his team to the HPE production center in Texas to view the underlying technology. Jardine then visited the Zunesis Advanced Technology Lab in Denver, where they spent two days working with Zunesis experts to set up a similar test environment and qualify it on the proposed HPE 3PAR solution.

Jardine and his team opted to move forward with 3PAR, purchasing an array for each active data center at Fort Lewis. To help implement the system, Zunesis sent a team to Durango to assist with build-out and testing.

RESULTS

Jardine and his team were able to design an entire system to meet all of the college's needs, with improved performance and stability. "With this new system, we can leave without worrying about the system going down," says Jardine. "There have been no issues with the storage at all."

Support for the system has made life much easier for Jardine and his team. The storage arrays automatically "call home" to HPE through a service processor if anything is wrong. "With our previous environment, we spent a lot of time calling the service, creating service tickets, and going through that process," says Jardine. "Now they call us and notify us of what's going on, and if we need to take action. That has saved a ton of time, removed a lot of the guesswork, and made the process much more proactive."

One notable example of the performance improvement was an up to 30% reduction in the time to run daily ETL processes within the Fort Lewis data warehouse system. This enhancement helped alleviate any concerns that these processes would run into the busier daytime hours.

Also, Jardine's team no longer needs to do upgrades on their own. Now they schedule them out through HPE support, and the support team takes care of them. "It's been so easy and seamless that I came to the conclusion that we no longer have to do storage updates during middle-of-the-night maintenance windows," says Jardine.

Additional benefits include Adaptive Optimization that can move data between tiers, a thin reclamation process that dramatically reduces the necessary storage space, and overall improvements in the system's speed and performance.

The project demonstrates the type of cooperative relationship Zunesis forms as a dedicated technology partner. While the project required a large investment of time, the end result was a model of productive collaboration between multiple parties dedicated to achieving the same goal.



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