Texas Wesleyan University Shortens Disaster Recovery from Days to Hours and Streamlines Backup with Zero Capital Expense

THE CHALLENGE

"Smaller. Smarter." That's the motto of Texas Wesleyan University, which serves 3,200 students in Fort Worth, Texas. It's also what the university IT team sought in a new backup and disaster recovery solution.

The challenge was that the prior backup tool, which copied to tape, was complex: It required considerable expertise and engineering time to set up and administer, and neither the backups nor the recoveries were consistent.

Texas Wesleyan wanted a new approach to backup that would be easy to administer, more consistent and reliable, and enhance off-site disaster recovery capabilities. The university also wanted to pay for the solution as a monthly operating expense rather than a capital expense.

THE SOLUTION

Texas Wesleyan evaluated solutions from a number of providers and chose one from Mainline Information Systems, a partner it had worked with closely years earlier to virtualize its environment. "We were one of the first schools in Texas to go virtual," recalls Kendra Ketchum, director of infrastructure at Texas Wesleyan. "We made that move based on our partnership with Mainline and the trust we have in them, and also on the empowerment model our CIO promotes. We have freedom to try new products and be innovative, something that can be difficult to find at the larger state universities."

For Texas Wesleyan's current challenge, Mainline recommended its Managed Backup/ Recovery Services. The services can use a wide range of solutions, and the best fit for the university's requirements was an appliance from Actifio. One of the appliances is on the university's premises, where it copies data from servers and storage, deduplicates and compresses the data, and replicates it to another appliance at a Mainline co-location center 40 miles away.

THE RESULTS

Reducing disaster recovery from days to hours

There are many benefits. If a failover is needed, for instance, the Texas Wesleyan IT team can start up a virtualized server and restore a service directly on the remote appliance. This enables the IT team to reduce recovery time service level agreements (SLAs) for critical applications from three to five days down to four hours — an 18-fold faster recovery. The result is enhanced resilience for critical university applications such as Colleague ERP modules from Ellucian, Microsoft Exchange email, and a video platform that supports the Blackboard Learning Management System.

Customer:	Texas Wesleyan University
Headquarters:	Fort Worth, Texas
Employees:	517 full and part-time

THE CHALLENGE

- Enhance backup and recovery success rates
- Minimize IT administration time
- Reduce disaster recovery time SLAs
- Avoid capital expenditures

THE SOLUTION

Mainline Managed Backup/Recovery Services

- Actifio 100T Copy Data Storage Systems

THE RESULTS

Business continuity and disaster recovery

- 18-fold faster recovery time SLAs enabled (3-5 days reduced to 4 hours)
- Near-100% backup success, up from about 70% in prior environment
- 100% recovery success, up from about 90%

Operational efficiency/cost savings

- $2 million-$3 million remote disaster recovery site costs avoided
- Deduplication/compression savings include
  - Up to $54,000 in annual connectivity costs avoided
  - 90% reduction in storage requirements
- Five-figure annual tape operations costs eliminated
- Day of potential downtime eliminated in critical server migration

Managed service avoids capital spending

Another benefit is that that Texas Wesleyan doesn't have to spend the $2 million to $3 million that would be required to build and operate its own remote site for disaster recovery. Instead, the school gets backup and disaster recovery services at a fraction of that cost, spread out as an operating expense—a flat, monthly subscription fee—over five years. The Mainline solution enables capital expenses to be avoided.

"It was an easy choice," Ketchum says. "We didn't renew the cost of our prior backup tool, and we eliminated a high five-figure annual tape cost of operations."

The deduplication and compression efficiency of the Mainline solution also means that the connection line between the data center and remote site costs only $500 a month. "We're seeing about a 90 percent reduction in data size due to the Mainline solution," Ketchum says. "If it didn't deduplicate data and then rehydrate it on the other end, we'd have to pay up to ten times the $500 monthly amount for a connection line." That's equivalent to saving $54,000 a year.

Backup success near 100 percent

Says Terrance Johnson, systems engineer at Texas Wesleyan: "The backup success rate is now close to 100 percent, compared to an overall rate of about 70 percent in the prior environment. The recovery success rate is 100 percent, up from about 90 percent. And one of the biggest benefits is that we can easily validate backups and test recoveries. I can do a restore quickly and say, 'Yes, this is a good backup.' We couldn't do that before."

A server that might have taken a day to recover from tape previously can now be recovered in 20 minutes, Johnson adds.

Critical migration without downtime

When another university bought Texas Wesleyan's law school, the IT team strategized how to transfer the law school's servers without disruption. "To capture the servers in a snapshot would require turning them off, which means we'd have to quiesce all the databases and have an outage of about a day," Ketchum says. "Instead, Terrance wrote up a document showing how we could use the Mainline solution to do the same process just like a backup and recovery, without downtime."

Says Johnson: "We will connect the other university to the appliance over the network, and the appliance will then see their servers and storage as recovery destinations. It's as simple as clicking restore, and the servers and data will be theirs." Users will avoid a day of downtime and the IT team shortens weeks of planning.

Cutting admin time to add more value elsewhere

As much as 30 percent of Ketchum's and Johnson's time had been spent on backup and recovery issues in the prior environment. "Now we can devote that time to new projects that are more useful," Ketchum says.

One of those projects is a voice over Internet protocol (VoIP) deployment that could bring projected five-figure annual savings. Another is an identity management initiative that will streamline new account provisioning from 30 minutes down to a couple clicks. A third is an IT service catalog that will allow such services to be delivered faster. "Enabling our team to do more value-added work was my top priority when I arrived here three years ago," Ketchum says.

Because the Mainline solution is a managed service, "if I need help, I can pick up the phone and just say, 'we need assistance in this area,'" Ketchum says. "I think all of us rest easier at night knowing that the data to help us recover from a disaster—or even an inadvertent deletion—is right where we can get it and restore it to the university as quickly as possible. That lets us focus our energies in areas where we can add more value."

For more information, call your Mainline account representative or call Mainline directly at 866.490.MAIN(6246).