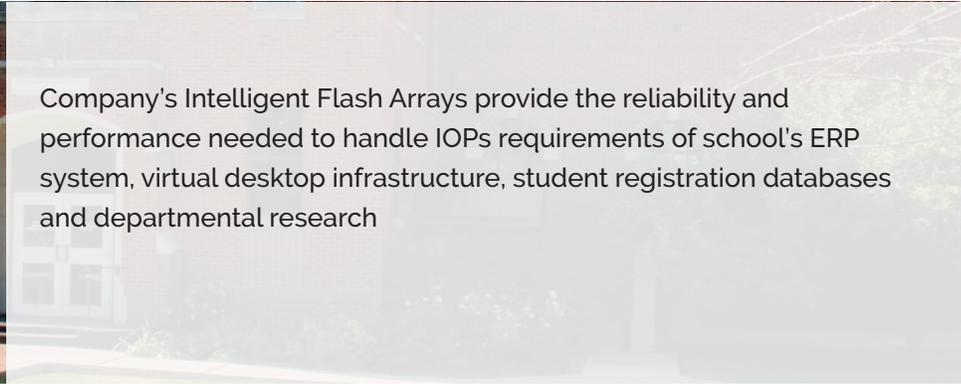


Tegile Performs Like A Ferrari For Northwest Nazarene University



Company's Intelligent Flash Arrays provide the reliability and performance needed to handle IOPs requirements of school's ERP system, virtual desktop infrastructure, student registration databases and departmental research



Challenges

- Existing hybrid array was unreliable
- ERP and VDI environment required high IOPS and low latency

Solutions

- Tegile IntelliFlash Hybrid Array

Results

- Extremely high availability
- Performance headroom and protocol flexibility for future applications

Northwest Nazarene University, a nonprofit comprehensive Christian liberal arts university, offers more than 60 areas of study, master's degree programs in seven disciplines, accelerated degree programs, concurrent credit for high school students and a variety of continuing education credits. In addition to its 88-acre campus located in Nampa, Idaho, the University also offers programs in Boise, Twin Falls, Idaho Falls, and in cooperation with programs in 35 countries.

Founded in 1913, the University now serves more than 2,000 full-time undergraduate and graduate students, more than 6,000 continuing education students and 2,300 high school students through its concurrent credit program. One of eight U.S. liberal arts colleges affiliated with the Church of the Nazarene, NNU is the college for the Northwest Region of the United States, which includes Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Alaska, and parts of Nevada and Utah.

The Challenge: Implementing a high-performance SAN to utilize for the school's ERP system

Serving around 10,000 students, faculty and staff throughout the year, NNU's fully virtualized environment supports a variety of file shares, print and web servers, databases and ERP system. Looking to purchase a high-performance SAN to support its ERP system, IT administrators at NNU chose to implement a solution from Nimble Storage. But the decision to go with Nimble ultimately came with quality concerns.

"One of the problems with Nimble was there was a lot of failures – controller failures, hard drive failures, disk failures – and some OS issues," said Sal Simili, Director of Information Technology at NNU. "Nimble was good about their warranty. Auto-support would tell us there was a failure and send us out a new part. Redundancy worked well and things kept working."

When the school later received a budget that allowed for a new SAN for increased capacity, it decided to bring in Tegile to see how it would perform in comparison to the Nimble solution.

The Solution: Tegile Intelligent storage arrays perform 'fantastic' with no problems and no failures

IT managers in education institutions must support a wide range of workloads—everything from virtual desktop infrastructures (VDI) to student registration databases and departmental research. With each application and end user competing for storage resources, it can be difficult to deliver consistent performance and maintain 24x7 availability without seeing storage costs spiral out of control.

Tegile Intelligent Flash Arrays enable the transformation of an educational institution's IT infrastructure, delivering lightning-fast performance and high levels of availability at a cost that's one-third of traditional storage arrays.

Tegile arrays are fully redundant with no single point of failure. All media are dual-ported and accessible through a pair of active/active controllers. Users can also take instantaneous, space-efficient snapshots that can be replicated for disaster recovery.

In-line compression and de-duplication on SSD and hard disk throughout the array helps significantly reduce storage acquisition and operational costs.

Redundant operating system images in a virtual server platform are reduced to a single instance stored in flash. Hundreds or thousands of persistent VDI instances are shrunk down to one single boot image that can launch in seconds.

The Result: Tegile provides the IOPs necessary to support NNU's mission-critical ERP system with 40 percent capacity savings and the stability needed to eliminate failures

With Tegile installed and fully operational, NNU now has the product quality and performance it needs to support its workload.

"The big concern when you're running an ERP system is the number of IOPs," said Simili. "It just seems like we're not touching the Tegile array's performance. Our requirement is 10,000 or more IOPs available and it's like this thing is just cruising. We're barely using it. It's like driving a Ferrari at 25 m.p.h."

While the school's Tegile array hasn't yet suffered a failure so he can't rate the company's technical support, Simili said that he's been very impressed with Tegile personnel who have gone above and

beyond to support the installation. When moving its datacenter from one building to another, Tegile engineers came out to help, making sure that everything went well and that the storage continued to work well afterward.

After the success of NNU's initial 16TB Tegile array, which has seen its capacity increased with the addition of a 20TB expansion shelf, the school has recently purchased a Tegile T3100 to replace its Nimble Storage and better support its growing infrastructure.

"Tegile's performance has been fantastic – no problems, no failures," said Simili. "I'm very impressed with their service and product quality. We just keep throwing stuff at it and not much space is used up. It's been so stable; it works great."