Intelligent Infrastructure Gives SUU 80% More Capacity at 50% Less Footprint

VMstore

Southern Utah University (SUU) is a campus community about 250 miles south of Salt Lake City, where students can enjoy the proximity to national forests and monuments. With 11,000 students, more than 140 undergraduate programs and 21 graduate and certificate programs across six academic colleges, SUU proudly offers world-class, project-based learning opportunities where students gain professional experience before entering the job market. The 19:1 student/faculty ratio allows for a more personalized approach. While small, the university is considered leading edge regionally due to their investments in technology, specifically the development team. For example, they have successfully 'dockerized' many of their Banner applications. Having a solid infrastructure is critical for the development team, and VMstore has provided that stability.

The Challenge: Outages Due to Aging Storage Systems

The IT team at Southern Utah University was jittery, to say the least. They were about to do another firmware update on their aging standard infrastructure and on more than one occasion it resulted in a major campus-wide outage. Every VM was taken down. Multiple nodes were required to handle the 200 VMs they had, and as those aged out and they updated their code base, they realized that firmware updates were problematic. One of the controllers did not properly fail over, causing the outage.

Unfortunately, it happened again. The two major outages affecting the entire campus were enough reason for Josh Foremaster, Assistant Director of IT Operations at SUU, to seek other options. Foremaster explained that they had to make do with limited resources, but they were known for getting a lot done despite that. They are the only school in the state of Utah that did not raise tuition, two years in a row. That said, they were looking for a storage solution that delivered all they needed from a technical standpoint, but with lower TCO.

Prior to calling Pivotal Data Solutions, they worked with another VAR who recommended Simplivity to address their issues. Upon migrating from their legacy SAN systems to Simplivity, they realized that they were not getting the dedupe and compression they were promised. The limitations of standard infrastructure were apparent. They ran out of compute, memory and capacity, with no way of completing the cutover. They were stuck, unable to maintain the uptime if one node failed. They reached out to Lanai Bayne at Pivotal Data Solutions, who recommended Tintri Intelligent Infrastructure. Foremaster advised that they trusted Pivotal because they have always been forthright and honest in their recommendations, which have always been in line with customers' needs.

The Solution: Tintri VMstore EC6055

"The team at Tintri was amazing and expressed confidence in their solution," recalled Foremaster. "The SE did the demo call with a single interface, and I fell in love with it." He could not believe that the Tintri VMstore could do what he learned in the demo. He asked Lanai, "Hey, are these guys legit?" He needed reassurance because of his experience with the previous solution, and wanted to make sure he did not repeat the same mistake. The Tintri team answered all their questions and calmed fears, and SUU went on to purchase the VMstore EC6055. Their decision was based on two factors: that the team at Tintri addressed all their concerns, and that they consider Pivotal a trusted advisor. There was no need for an onsite demo.

Foremaster also points out that the VMstore dashboards are so much easier to read. Their legacy storage had a centralized way of connecting with various arrays to see the performance. "That was quite messy. I'm looking at the VMstore dashboard right now and it has three tabs: Dashboard, VMstore, and Hardware. I can drill down as needed but the overview is one screen. I've got everything I really want to see on one screen which is amazing," he says.

Challenge

- Aging storage systems were causing campus-wide outages

Solution

- Tintri VMstore™ EC6055

Results

- Improved user experience with zero performance issues and downtimes
- Dramatically improved TCO
- Moving to VMstore freed up 14TB of physical space and 26TB of logical space
- Smaller footprint, from 6U to 2U

Tintri
Intelligent Infrastructure

The Results: One VMstore Runs the Entire SUU Campus

The entire SUU campus is now running on that single VMstore node, with zero performance problems. Foremaster describes the experience: "We are not even close to the IOPS it can do. I can see which VMs are consuming the most resources. It's solid, not a single problem."

Some of the applications and use cases running on the VMstore are: shared user drives and the Active Directory system; Novell Identity Manager, which handles provisioning for every single student, faculty, and staff; in-house development; code repository; the entire bookstore database; and the Cisco phone system.

Foremaster and the IT team at SUU completely vacated their old storage arrays onto the VMstore, and still have lots of space available. "This is where it blows me away." He continues, "Currently we are physically using 4.96TB, logical use is 9.46TB. We still have 14TB physical space available, and logical is 26.6TB. At one point our SAN deployment was about 70TB and because everything was thick provisioned, I was using about 50TB. Even if we take 75% of that and squish it down into almost 9.5TB of logical space used, that just blows my mind. It has met every one of our needs and more."

In closing, Foremaster sums up the Tintri experience, "We will be sticking with VMstore moving forward. The plan is to buy another unit as soon as possible. I am absolutely thrilled with it. I can say with certainty that I am 100% happy with Tintri's claims versus what they do. As far as I'm concerned, they have lived up to every single claim they made. I would buy another one tomorrow in a heartbeat, if I had the budget to do so."

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit tintri.com/vmstore.

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Josh Foremaster, Assistant Director of IT Operations, Southern Utah University

About Pivotal Data Solutions

Pivotal Data Solutions is an IT solution provider offering a wide range of technologies and services for every aspect of your environment. The Pivotal team delivers custom solutions with exceptional value for your unique goals and challenges and does everything possible to make your job easier. IT is a rapidly changing landscape, so it helps to have some of the best experts in the industry to advise, plan and implement the latest technology to increase productivity, reduce risk, cut costs and make IT easier to keep business moving forward. For more information, visit www.pivotaldatasolutions.com or email info@pivotaldatasolutions.com