Fresno Pacific University Virtualizes its Infrastructure with Tintri IntelliFlash™

IntelliFlash

Founded in 1944, Fresno Pacific University (FPU) is a nonprofit, independent Christian university that serves 3,500 students and 500 faculty in Central California. The university offers more than 100 majors across five different schools, and is one of the top regional universities in the Western United States according to U.S. News & World Report. More than 80 percent of faculty hold doctorates and all combine challenging scholarship with real-world application. The university places a unique emphasis on individual attention and contact beyond the classroom.

The Challenge: Poor Virtualized Application Performance

Webster Alfonso, Manager of Network Services at Fresno Pacific University, knows that he and his teammates in the Network Services department play a crucial role in their university's overall educational experience. A team of four, they create and maintain an infrastructure that supports a combined 4,000 people – in other words, they're facing a 1:1000 ratio.

"We're a small, but mighty team. It's our job to make sure that our university has an infrastructure that doesn't just stay out of the way, but really boosts the overall educational experience," says Alfonso. "Whenever our learning management or ERP systems go down, everyone notices. It's not pretty, and we try to avoid that at all costs."

For years, FPU ran on older, spinning disk-based system. Performance wise, they felt their SAN performed decently. However, after a certain amount of time and an uptick in demand, their legacy infrastructure was unable to offer the functionality, speed or capacity necessary to keep up with the university's Information Services (IS) department and the demand for a cuttingedge educational experience.

"The process of expanding performance and capacity was arduous. Anytime someone would come to us and ask for a new server, we'd have to go through this whole process of figuring out what specs we needed, what equipment we needed to buy, and also had to take into account if they might ever need to expand capabilities," says Alfonso. "It made it very difficult to scale."

The situation was clearly unsustainable. "We knew we needed to make a change," says Alfonso. "Our goal is to make the university's infrastructure invisible to the educational experience – not a bottleneck."

The Solution: Tintri IntelliFlash

To resolve this issue, FPU set forward with a bold goal: its network services department was going to virtualize the entire university infrastructure. "Virtualization makes things so much easier for us. Backing up servers, spinning up new ones – it all becomes a piece of cake," says Alfonso. "It gives us flexibility and reliability, and turns IT into a strategic asset that can scale on demand with the needs of our institution."

FPU began the process of virtualization on its legacy storagesystem, but soon realized that the setup would no longer cut it. Fresh equipment was needed to get the job done. "Our current SAN had reached the end of its life. We initially thought we'd renew with that vendor, but found that it was going to be quite costly and limited in functionality. It didn't seem like they were really keeping up with features at our price point, so we ended up branching out and speaking with other vendors."

FPU's search eventually became a showdown between Tintri and a competing storage system provider. In the end, the university chose Tintri, mainly for its ability to have an all-flash and hybrid pool in the same system, as well as its its wide breadth of support for storage protocols. "We love the flexibility that IntelliFlash provides. We're able to switch

Challenges
• Poor virtualized application performance

Solution
• Tintri IntelliFlash

Results
• Easy-to-use systems with minimal maintenance required
• $50k in projected cost savings
• 60 percent data reduction rate (46 percent data compression; 23 percent deduplication)

Tintri
Intelligent Infrastructure

between flash and hybrid instantly and also expand without buying another box, something the competing vendor would have made us do," says Alfonso. "And with IntelliFlash's SAN and NAS protocol support, we knew we could scale our infrastructure with ease and without fear of any complications."

The sales experience also played a role. "The quality of the channel vendors we worked with was also a big factor. Tintri's partner was extremely knowledgeable about the entire storage space, including competing vendors, while the competitor's only really knew about the competitor's products and services. We trusted the channel partner a lot more because we felt we were in good hands with them."

The Results: Rapid Virtualization, 60 Percent Data Reduction Rates, and $50k in Savings

Since deploying IntelliFlash, FPU's Network Services department has been able to scale with ease. 70 percent of the infrastructure is already virtualized, and it will reach 100 percent soon enough.

"With IntelliFlash, we're a lot more flexible with what we can offer our IS department. Anytime they need a server spun up, we're able to do it in minimal time, without any headaches. We're also able to offer them faster storage for their databases," says Alfonso. "It sounds simple, but it's really a dramatic shift in what we can do for the university – a night and day difference."

The benefits expand beyond virtualization and into data compression and deduplication as well. "We already expected a blazing fast and affordable experience from IntelliFlash– but what really surprised us was the effectiveness of its compression and deduplication capabilities," says Alfonso. "We're getting a 60 percent data reduction rate, with 46 percent compression and 25 percent deduplication. When we saw these statistics, we knew in our gut that we really got a bang for our buck. Then we went out and calculated it to quantify it. We estimate that by going with IntelliFlash, we saved about fifty thousand dollars."

IntelliFlash's ease of use, simplicity and high performance certainly have FPU thinking about expanding its use of IntelliFlash systems in the future. "Collaboration is so much easier. We don't have to think as much anymore about performance or capacity.

We know that IntelliFlash will just work." IntelliFlash shelves are the equivalent to a whole rack from our prior setup," said Kuzishchin. "We're saving lots of space and costs. Overall, the experience is great – we've got a lot more freedom to set up our infrastructure the way we like."

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Webster Alfonso, Manager of Network Services at Fresno Pacific University

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