



## CASE STUDY

# Lee University Goes to the Head of the Class by Delivering a Flawless VMstore VDI Experience with Tintri VMstore™



Lee University is a private, comprehensive university located in Cleveland, Tennessee, in the foothills of the Appalachian Mountains. Lee is emerging as a leader in higher education in the southeastern region of the U.S. and is consistently ranked in the "Top Tier" of the Best Regional

Universities in the South by U.S. News & World Report. Lee is also included in Princeton Review's "Best Colleges," and is ranked among the 141 colleges named Best in the Southeast.

The university has experienced a remarkable transformation that has included significant growth in its academic programs, student enrollment and diversity, and faculty expertise, as well as an expanded sense of mission and vision. As technology becomes integral to classroom learning and campus operations, Lee is committed to adopting solutions that meet the needs of its students, faculty and staff, and provide a foundation for the university's evolution and growth.

## The Challenge

Lee University maintains sixteen computer labs that leverage Virtual Desktop Infrastructure (VDI), providing software services to students via ninety clients. While VDI was an ideal solution for delivering software applications that are not available off-campus, the unique I/O characteristics of VDI made it difficult for the university's conventional storage systems to adapt and scale. At the same time, near-simultaneous logons by a large volume of lab users also created big spikes in read I/O.

Unfortunately, these activities dramatically impacted the log-in time for users of VDI services, which exceeded seven minutes. This was an unacceptable service level for the labs. VDI services were then moved to the faster fibre channel connectivity reserved for databases, but the performance continued to be too slow.

"The computer lab plays an integral role in the education of our students and user experience is a priority," explains Aaron Looney, Systems Administrator. "We needed a better solution that could deliver the performance our lab environment demands and the ease of management our IT team needs to effectively support VDI services. It was all about increasing speed with faster storage."

Although Lee University evaluated several storage solutions that promised to deliver the speed the university was after, they all lacked the stability and reliability for consistent VDI services.

## The Solution

WrightCore, Lee University's technology partner, suggested a try and buy scenario with Tintri VMstore. The Tintri solution was put into VDI production and demonstrated a level of performance that exceeded any of the other storage vendor options, which led WrightCore to recommend that the university move its virtual server environment to Tintri as well.

## Challenge

- Deploy fast, reliable, simplified storage to deliver VDI at scale while reducing IT burden

## Solution

- Tintri VMstore

## Results

- Delivers a consistent VDI user experience with fast, predictable performance
- Provides end-to-end data integrity, security, and high availability
- Easy to configure, monitor, manage, protect, and scale
- Simplified management frees up IT team to focus on strategic initiatives



“We’ve always been a SAN environment, so we took a cautious approach when deciding to move our server virtualization workloads to Tintri storage,” says Looney. “Fortunately, even when we moved our critical server workloads over, Tintri ran circles around the existing SAN solution – in fact, we got better performance out of our servers.”

The university selected Tintri VMstore for both its VDI and virtual server environments, and also ended up moving backup and replication-based disaster recovery to Tintri as well.

## Business Results and Benefits

A team of ten IT professionals handles everything from the helpdesk to servers to networking – if it has lights that blink, they manage it. That’s why it’s important that storage doesn’t take time and resources away from services that are key to on-going operations and advancing campus initiatives.

“The day we unboxed the Tintri systems they were stacked, cabled and introduced into the new virtual environment in a couple of hours. It was really that simple to set up,” says Steven Falls, Systems Administrator.

Prior to Tintri the IT team spent considerable time tweaking storage to try to improve performance for its VDI environment. Once the university moved to Tintri, the team noticed a significant increase in overall application performance and that, in turn, eliminated a large number of management tasks and freed the team to focus on other strategic campus projects.

“Tintri really is a ‘set it and forget it’ solution,” Looney notes. “It’s not just fast, it’s reliable and stable as well. We have never had any issues – it’s just a solid appliance.”

Perhaps one of the biggest benefits, however, is the financial impact on backup and replication operations, where the university has saved significantly.

And when the pandemic forced remote delivery of classes and content, the Lee IT team was prepared. Zoom and virtual applications, as well as virtual “V” labs, helped students gain trouble-free, anytime online access to the software they needed and their personal network drives.

## Looking Ahead

The university’s IT team is always seeking out new technologies to meet the needs of today’s students, and Tintri will enable the addition of new services without concerns about performance, management complexity, or user experience.

“Tintri is the cornerstone of our VDI services, but we also look forward to leveraging Tintri for SQL backups, which we expect will reduce our DBA’s work by up to five hours each day,” concludes Looney. “That’s a dramatic reduction that will enable him to work on other projects impacting our campus. With Tintri, there’s no end to the possibilities for Lee University and our IT team.”

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*Aaron Looney, Systems Administrator, Lee University*

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



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