Judson Independent School District is in the business of providing a quality education for students, and technology plays a major role in enhancing each student's education experience. Teachers rely on computer-aided learning as a strategic medium for their curriculum. Citrix® virtual desktop login times for students were averaging between 10-15 minutes — wasted time before a student could even begin to learn. Today with Pure Storage, the log-in time for Citrix XenDesktop® is 36 seconds, which gives back many valuable minutes per class period for teachers to educate and for students to learn.

JISD
JUDSON INDEPENDENT
SCHOOL DISTRICT

BUSINESS TRANSFORMATION

Students and teachers spend up to 33% more time on active learning.

GEO

North America

INDUSTRY

Education

"Data storage is the backbone of the district. Student access is dependent on data — how quickly we can read and write. So the impact of Pure Storage has been huge. Pure has made life simpler for everyone in the district."

Chris Dean, *Director of Network Services*

TECHNOLOGY AT THE HEART OF JUDSON INDEPENDENT SCHOOL DISTRICT'S MISSION TO EDUCATE EVERY STUDENT

Technology is an increasingly important tool in education, but its benefits cannot be realized if it makes learning harder, rather than easier. That's the lesson learned by the IT team at Judson Independent School District in Texas.

"We believe technology is at the heart of our mission to educate every student so they will be able to compete in a global society," said Steve Young, chief technology officer for Judson ISD. "We know that students are going to need technology to succeed, and that means we need to deploy quality products to support them."

A key technology initiative employed by Judson ISD is Citrix XenDesktop for virtual desktop infrastructure (VDI), which promised greater flexibility and efficiency in an environment of rapid growth and increased complexity. What happened initially, however, was not what anyone wanted — they were faced with unhappy students and teachers.

Among those enthusiastic about the new system are the IT staff, who had been trying to keep pace with ever-increasing demands from a user base of over 23,500 students, 3,000 employees and thousands of connected devices ranging from desktop PCs to tablets.

With thousands of students trying to log on at the beginning of each class period, response times slowed to a crawl. It would take as long as 15 minutes for an individual student to log in to a lesson application, a totally unacceptable lag time, given class periods are only 45 minutes.

"Class time is all about active learning, so we had to fix this problem," Young said. "We started looking for solutions that would provide an optimal experience for our students."

PURE STORAGE ACCELERATES KEY APPLICATIONS

After learning about Pure Storage at a Gartner conference, Young arranged a proof-of-concept trial, using a Pure Storage FlashArray™ to support the Citrix VDI deployment. The benefits of an all-flash solution from Pure Storage were evident from the start.

"It only took a couple of hours to have the Pure Storage array up and running. It was very simple and straightforward," Young noted. "We put the Pure Storage array into a production environment in one of our biggest schools. The end-user experience improved dramatically. The Pure Storage arrays can manage thousands of IOPs lickety-split, with very low latency."

COMPANY:

Judson Independent School District
www.judsonisd.org

USE CASE:

- VDI – Citrix® XenDesktop®
- Database

CHALLENGES:

- Log-in times for Citrix virtual desktops were unacceptably long.
- The district needed to support rapid student and application growth.

IT TRANSFORMATION:

- Citrix XenDesktop log-in time was reduced by up to 95%.
- 10:1 data reduction optimizes efficiency of storage resources.
- Nondisruptive upgrades simplify storage management.

"The fact we can do an upgrade with no downtime in a production setting

— that's phenomenal."

Chris Dean, *Director of Network Services*

Chris Dean, director of network services for the district, recalled that students and teachers were not told that a new storage infrastructure was being tested. After a couple of weeks, the IT staff surveyed the end-users who had been the most vocal in their complaints about slow performance. "They said it was the best response they had had all year, and this was in March. They had been suffering with slow access times for six months. It was then we knew we had the right solution."

CONSOLIDATING WORKLOADS ON FLASH

After the success of the initial trial, Young and his team quickly expanded the use of Pure Storage arrays, installing one in each of its three data centers. In addition to their original Citrix VDI use case, the Pure Storage arrays now support other applications including back-office financial systems, Microsoft SQL Server, and network monitoring.

"Every time we add another database or application, it doesn't phase the Pure Storage arrays one bit," Dean noted. "Data storage is the backbone of the district. Student access is dependent on data — how quickly we can read and write. So the impact of Pure has been huge. Pure has made life simpler for everyone in the district."

"Our district is growing rapidly — more students, more teachers, several new schools, and every department is buying new applications that we have to support," Young said. "Things are increasingly complex, but the size of the IT staff has remained about the same. So, our search for products mandated simplicity and reliability. Pure Storage has more than delivered on these needs."

SIMPLIFIED MANAGEMENT PLEASES IT STAFF

Young and Dean both cited several benefits of Pure Storage for the IT staff: simplicity of management, software upgrades with no downtime, proactive support, and more efficient use of storage resources.

"A few months after we installed the Pure Storage arrays, we ran into a situation where we were getting alerts," Dean recalled. "Before we even knew about it, Pure Storage was on the phone to let us know there was an issue. The support team took care of the issue promptly. And the fact we can do an upgrade with no downtime in a production setting — that's phenomenal."

Young said he's "thrilled that we found a solution that meets our needs, doesn't require a lot of my staff's time, and that provides a great end-user experience."

While students benefit from the vastly improved access times, the district's IT budget has gotten a boost from the efficiency of the Pure Storage arrays. "We've found the deduplication and compression features of Pure to be truly amazing; up to a 10:1 reduction," Young reported. "This dramatic improvement in efficiency allows us to use the Pure Storage arrays for many more applications that we initially intended. The three words I'd use to describe Pure Storage arrays are; simple, reliable and fast."

PURESTORAGE®

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