

Virtualization

Virtualized Desktops Deliver Mobile Learning



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Colleges and universities across the country seek to provide engaging, personalized learning environments, using multimedia-rich curricula to support collaborative education and distance learning. And, armed with laptops, tablets and smartphones, students and faculty are demanding anytime, anywhere access to educational resources and applications.

Thomas Jefferson School of Law (TJSL), an independent nonprofit school in San Diego, started as a small, part-time evening law program for working professionals in 1969. It expanded into a full-time law school with a growing student base and an evolving curriculum.

In 2010, we realized that major changes and upgrades needed to be made to the outdated IT infrastructure. But creating a successful new IT environment required moving away from the conventional server-client computing model to give us new ways of working and thinking.

In early 2010, the opportunity to radically change the computing model presented itself when TJSL began constructing a new facility to house its faculty, staff and 1,000 students. We began testing remote desktop virtualization solutions. However, while many solutions were capable of handling standard office applications, every one we tested failed to adequately support the multimedia experience required in our environment.

In August 2010, we found a solution that worked: Teradici's PC-over-IP technology (PCoIP), Samsung zero-client displays and VMware View desktop virtualization. Up and running in just four months, we eliminated 200 desktop PCs, replacing each with a Samsung NC240 24-inch PCoIP zero client monitor, providing faculty, administrative staff and students with a flexible computing experience. The PCoIP protocol compresses, encrypts and encodes the entire computing experience at the data center and transmits "pixels only" to the user's desk, for a simple, easy-to-manage centralized solution. This technology allows our IT department to centrally manage virtual desktops while providing a rich multimedia experience.

As a result, our need for IT resources has been significantly reduced. We are now able to set profiles for each PCoIP zero client and push out firmware updates automatically. IT no longer wastes hours going from computer to computer, manually updating each one. Instead, we can manage everything from one desk, fixing any issues remotely.

At TJSL, we support mobile learning initiatives, enabling students, faculty and staff to remotely access our virtual desktops from their personal laptops. By allowing individuals to download the VMware View client, we've enabled them to connect to the Internet and pick up where they left off on their desktop—whether using a PC, Mac or tablet.

We were also able to meet our green IT goals for the new building. Implementing a virtual desktop infrastructure allowed us to effectively run the entire virtual environment by using the solar array on the roof. We also reduced our servers from 35 to seven, which allows us to cool the entire data center with just two small air conditioners.

Moving to a virtualized environment has enabled us to provide students and faculty with the best computing

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experience, both inside and outside the classroom, while also reducing costs.

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