

Project Overview

The Bank of Stockton began evaluating VDI solutions in 2012 and selected VMware Horizon with View as the software foundation for the solution shortly thereafter. The first deployment occurred in February 2013, with the initial VDI clients running on IBM BladeCenter servers and Cisco switches. At first the solution performed as expected, but rapid expansion of the number of deployed workstations subsequently caused performance to bog down.

To resolve the performance issues, the Bank of Stockton replaced its existing Cisco switch with a more powerful Cisco Nexus 5000 Series switch, and implemented a hybrid storage solution from Tegile Systems based on the Tegile HA2300 array.

The Tegile HA2300 array employs in-line compression and de-duplication on SSD and hard-disk drive media throughout the array, allowing the Bank of Stockton to significantly reduce its acquisition and operational cost of storage. The array supports Fibre Channel and iSCSI block protocols, and both NFS and CIFS file protocols are available for NAS environments, allowing the Bank of Stockton to eliminate storage siloes. All protocols are supported concurrently, to each controller. The product also provides integrated thin snapshot, thin clones and remote replication functionality to shrink backup windows, and integrates with all major backup and site recovery software (VMware vCenter™ Site Recovery Manager™). Application-optimized templates accelerate the provisioning process and deliver individual virtual-machine-level monitoring of performance.

As a result of these improvements, performance rose from 2,000 IOPS to more than 30,000 IOPS, ensuring excellent performance for all of the bank's core applications on virtual desktops.

Today the Bank of Stockton has deployed more than 200 virtual desktops as part of the View implementation, and has virtualized about 95 percent of its servers.

VMware and Tegile Support

One of the key advantages of the VMware Horizon with View solution, according to Lo, was the high level of support provided both by VMware and Tegile Systems.

"We have a small administrative staff and they're responsible for keeping everything running reliably at 16 branches," said Lo. "With VMware and Tegile supporting us our staff can work with this technology without a massive training effort and without requiring us to bring in an army of consultants," he said. "The products themselves save us money, and the level of support we receive saves us more."

One example cited by Lo is the direct, instant technical support he gets from Tegile. "Our experience with storage vendors in the past was that you'd call with an issue, somebody would take notes, they'd pass those notes on to somebody else, and four hours later you'd get a call from an engineer who could actually help you. With Tegile, an actual engineer answers the phone, and we get the help we need right away. I'd have to say Tegile is one of the best vendors I've had the pleasure to deal with. We always get the support we need in minutes."