



*“VMware High Availability and EqualLogic’s iSCSI SAN ensure that our critical applications experience minimal production downtime in the event of a hardware failure. You can’t put a price tag on that capability when you’re a customer-centric business.”*

— Arell Chapman  
Assistant Vice President –  
Network Administration,  
United Bank and Trust

#### KEY HIGHLIGHTS

##### Challenge

Upgrade IT infrastructure and create a cost-efficient virtualized IT environment

##### Solution

VMware Infrastructure 3 and EqualLogic virtualized iSCSI SAN combine to simplify IT management and improve operations.

##### VMware at Work

VMware Infrastructure 3 Enterprise, featuring:

- ESX Server 3 with VMFS
- VirtualCenter 2
- VMotion
- Distributed Resource Scheduler (DRS)
- High Availability (HA)

EqualLogic PS400E storage array, featuring:

- Fully redundant, hot-swappable enterprise storage architecture
- 2GB mirrored, battery-backed cache
- 10.5 TB of raw capacity
- Bundled RAID protection, snapshots, clones, replication
- Automated load balancing and seamless scalability

##### Deployment environment

- ESX Server running on HP DL585s with four duo-core processors
- Guest operating systems: Windows Server 2003, SUSE Linux
- Applications: Citrix Presentation 4.0 servers, and banking software ITI Premier: Navigator, Director, Internet Banking, and Remote Deposit Capture

## United Bank and Trust

Founded in 1860, United Bank and Trust (United) is an independent community bank offering personal banking, business banking and wealth management services to customers in southern Michigan.

Faced with an aging set of servers within its IT infrastructure, United decided to embrace virtualization as way to move forward. “We didn’t look at our servers and try to come up with a reason why we should virtualize them,” explains Arell Chapman, assistant vice president of network administration at United. “We looked at our servers and tried to figure out if there was a reason why we shouldn’t virtualize them. And for the vast majority of our servers, virtualization was absolutely the way to go.”

United deployed the VMware Infrastructure 3 solution together with an EqualLogic PS Series virtualized iSCSI SAN, which established an enterprise storage platform to achieve the high availability, data protection and performance required for United’s new generation, virtualized IT environment. “Our experience with VMware and EqualLogic has far exceeded our expectations,” says Chapman. “The combined solution is simple, fast, flexible and reliable.”

### Results

- Save tens of thousands of dollars in hardware costs. “We had 25 servers that we wanted to retire and VMware technology allowed us to virtualize them without having to spend money on replacement boxes,” says Chapman.
- Reduce application-troubleshooting time by a week. “The combination of VMware Infrastructure 3 and the EqualLogic iSCSI SAN has allowed us to easily create a duplicate IT environment for testing and development purposes,” says Chapman. “Having that testing ability saves us seven to 10 days worth of troubleshooting time when we roll out a new application.”
- Reduce cooling costs in data center by 10 percent. “The air conditioning in our data center was nearly maxed out from all our physical servers,” says Chapman. “By implementing virtualization, our air-conditioning utilization dropped down below the 90 percent mark and saved us the costs of having to replace an older air-conditioning unit for the time being.”

