

Republic Bank



“With desktop virtualization, we are able to support our Tax Refund Solutions business in a much more efficient, higher performance manner—while saving the company hundreds of thousands of dollars a year.”

— Sean O’Mahoney
Vice President and Senior
Manager of Technology Services
Republic Bank

KEY HIGHLIGHTS

Challenge

Republic Bank wanted to reduce the cost and increase efficiency of the annual tax-preparation service of its Tax Refund Solutions business unit.

Solutions

The bank virtualized the desktop infrastructure of its seasonal TRS call center with VMware View.

- Desktop virtualization cuts costs and increases efficiency of seasonal call center.
- Security features prevent users from unauthorized access or activity.
- The frequently upgraded in-house tax service application is deployed easily via linked clones.
- The 140 virtualized datacenter servers on four physical hosts yield outstanding consolidation ratios

Results

- Call-center costs were reduced approximately \$300,000 a year.
- One deployment established infrastructure to last five to seven years.
- The business unit’s needs were met for affordable, efficient service.
- VMware automation features brought the business agility of a private cloud.

Desktop Virtualization Transforms Tax Service Call Center at Republic Bank. VMware View 4 Slashes Costs, Improves Productivity.

Republic Bank Tax Refund Solutions Unit Saves Approximately \$300,000 a Year with VMware Desktop Virtualization.

Every year, Republic Bankcorp’s Tax Refund Solutions (TRS) business unit staffs a call center with 450 seasonal workers hired to help customers prepare tax returns. Every year, the bank rented a fleet of call center computers for six months. The problem was that this six-month rental cost as much as a three-year equipment lease. Managing the deployment also posed numerous security and imaging headaches. Already familiar with the advantages of virtualization in its datacenter, Republic Bank turned to VMware for a solution. Desktop virtualization with VMware View 4 today provides Republic Bank with a cost-effective, efficient call center infrastructure that slashes expenses, simplifies technology management and wins rave reviews from the TRS business unit.

“Our VMware desktop virtualization solution—including devices, monitors, licensing and storage—cost, for an entire infrastructure that will last five to seven years, just a little more than the amount we previously spent every year just to rent equipment,” says Sean O’Mahoney, Republic Bank vice president and senior manager of technology services. “What’s more, VMware technology improves security and streamlines application upgrades.”

Datacenter Virtualization Establishes Trust in VMware

Republic Bank is a commercial bank with more than \$3.2 billion in assets, 850 year-round associates and 44 banking centers in Kentucky, Indiana, Florida and Ohio. The bank started virtualizing its datacenter nearly three years ago, after running into common power, space and cooling limitations. Today the bank’s datacenter is approximately 70 percent virtualized, including print servers, file servers and key applications such as Microsoft Office SharePoint Server, Microsoft Office Communicator and Microsoft System Center Configuration Manager. Republic Bank runs 140 virtual machines on four physical servers. As an example of efficiencies gained, bank technology staff cites the disaster recovery repository of the TRS business unit.

“We were tying up three-quarters of a rack of DR servers that were just doing nothing, but we had to have them available because of the importance of the TRS business,” says David Richerson, manager of infrastructure services. “Virtualizing those DR servers freed up all of those resources.”

Upgrading this year to VMware vSphere, Republic Bank is deploying the industry’s leading virtualization platform for holistically managing large collections of infrastructure components—including CPUs, storage and networking—as a seamless, flexible and dynamic operating environment. VMware vSphere provides the enabling technology for delivering IT as a service with policy-driven automation. Features such as VMware vMotion, VMware High Availability and VMware Distributed Resource Scheduler

VMWARE AT WORK

- VMware View 4
- VMware vSphere 4
- VMware vMotion
- VMware High Availability
- VMware Distributed Resource Scheduler
- VMware vCenter Site Recovery Manager
- VMware vCenter Server

DEPLOYMENT ENVIRONMENT

Primary Application

- VMware vSphere virtual infrastructure

Primary Hardware

- Wyse thin clients
- EMC storage
- IBM servers

Primary Software

- Tax Refund Solutions customer service application
- Microsoft Office SharePoint Server
- Microsoft Office Communicator
- Microsoft System Center Configuration Manager
- Microsoft Active Directory

Guest Operating Systems

- Microsoft Windows 2003 and 2008

automate operations and ensure business continuity. With virtualization, the bank's technology group provides the business units with high levels of service at low total cost per application workload.

"We're getting outstanding consolidation ratios on our server environment, 35 or 40 virtual servers per physical host," Richerson says. "But it goes beyond consolidation. We essentially have a private cloud, with VMware services moving machines automatically to balance the processor load."

When the infrastructure-services group's attention turned to increasing the cost efficiency of the bank's seasonal tax service, desktop virtualization was the clear choice.

Desktop Virtualization Transforms Call Center

Determined to improve Republic Bank's call center infrastructure, O'Mahoney called on his familiarity with VMware desktop virtualization from his work with a previous employer. "I had experience with the platform," he recalls. "I knew what the possibilities were, what it could do, and I knew it was a perfect fit."

VMware View is a groundbreaking technology for delivering desktops as a managed service. The solution transforms desktop management into a simplified and automated process, reducing the total cost of ownership, enhancing management control over system resources and providing end users with a high performance desktop experience. Republic Bank's virtualized call center employs VMware View 4 with IBM servers, EMC storage and Wyse thin clients.

One key advantage is reduced cost. Maintaining the virtualized desktop infrastructure will cost Republic Bank roughly \$20,000 a year over the solution's five- to seven-year lifespan, O'Mahoney estimates—compared to approximately \$300,000 a year spent previously just to rent devices. What's more, these cost reductions come along with improved infrastructure management.

Republic Bank architected the virtualized desktop infrastructure to provide tight control over information security. The vSphere View software is linked to Microsoft Active Directory, providing password-protected access to users' Microsoft Windows sessions. The thin client devices, lacking hard drives, give end users no means to capture data or in fact do anything bank management has not authorized.

"We locked out everything," explains Scott Estes, desktop support manager. "We disabled all USB ports; end users aren't allowed to make any changes to the thin clients. The most they can do is physically unplug it and take it out the door—and that gives them nothing because no data resides on the machines themselves.

"From the TRS management perspective, one of the biggest values we gave them was the assurance that the call center people could do on their workstations only what we wanted them to do," Estes continues. "They can't blow one out and make us spend hours fixing it. They can't open up a word-processing program and start writing books instead of answering calls, and they can't send email or capture data from the bank systems and send it offsite."

The VMware View desktop infrastructure also eases application upgrades. The TRS customer service application is developed in-house at Republic Bank and upgraded two or three times a week during tax season.

Before, the bank pushed upgrades out through group policy; end users had to use an editor program to add the new application, leading to error and confusion. With VMware View and its VMware View Composer feature, the bank simply updates its golden images to republish overnight; the next morning end users log into brand-new,

updated desktops. A vital component of VMware View 4, VMware View Composer delivers advanced virtual image management to conserve disk space and streamline virtual desktop provisioning and deployment.

“The first tax season using VMware technology, we had a pool of five gold images based on software restrictions outlined by the tax-refund people,” Estes explains. “From these five images we could create multiple clones. When call center people shut down their workstations for the night, the system would reboot, clean off all the profiles and start up fresh the next day. VMware View Composer gave us the ability to do linked clones so we could create 300 desktops from those five images in minutes and hours instead of days. That was our biggest win, being able to so efficiently maintain the desktops we gave to end users.”

VMware Technology Enables Outstanding Service to Business Units

Far from feeling constrained by system controls, desktop end users—the call center employees Republic Bank refers to as “associates”—felt liberated by the new infrastructure. Upgrades were automatic. The hardware worked reliably. Productivity soared. The first year operating with desktop virtualization, the call center handled more calls than in previous years with the same number of staff. The calls were of shorter duration, and customers received better service, thanks to the lack of delays.

“From the associates’ perspective, they got to come in, sit down and do their work every day and not worry about the technology that was delivering their desktop,” O’Mahoney says. “It was just there and it worked, every day, day in and day out.”

With virtualization a proven winner in both its datacenter and desktop environments, Republic Bank intends to continue advancing its VMware infrastructure for ever increasing efficiency and business agility.

“VMware technology allows us to support bank business units in a much more efficient, higher-performance manner while saving substantial amounts of money,” O’Mahoney says. “Desktop virtualization is a prime example. The solution worked flawlessly and won rave reviews from TRS management.”

