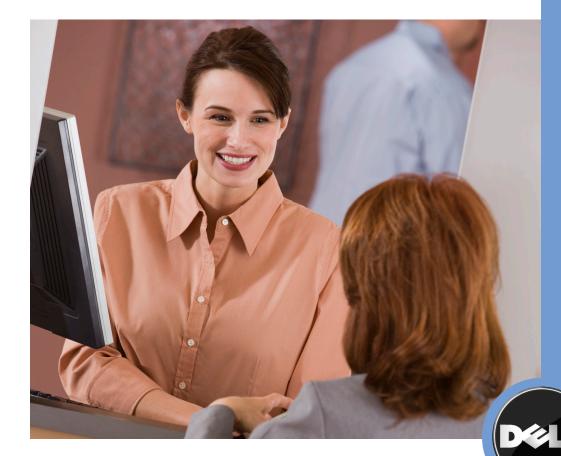
ROCK-SOLID DISASTER RECOVERY

Dell and partner Compuquip help Gibraltar Private Bank & Trust achieve 3-hour RTO with a 10-minute RPO for back-office systems



SOLUTIONS

- BACKUP/RECOVERY/ARCHIVING
- CONSOLIDATION
- VIRTUALIZATION

GIBRALTAR PRIVATE

Bank & Trust Company

CUSTOMER PROFILE

COUNTRY: United States **INDUSTRY:** Financial Services

FOUNDED: 1994

NUMBER OF EMPLOYEES: 250

WEB ADDRESS:

www.gibraltarprivate.com

CHALLENGE

Improve recovery time objective (RTO) and recovery point objective (RPO) ahead of hurricane season to mitigate risk of downtime.

SOLUTION

Virtualize back-office infrastructure, including the bank wire system, using VMware and Dell™ EqualLogic™ iSCSI SAN arrays with built-in snapshotting and replication capabilities.

BENEFITS

- Enhanced disaster recovery capabilities in time for hurricane season
- 2 hour RTO (improved from 48 to 72 hours)
- 10-minute RPO
- 80% reduction in server footprint (30 consolidated down to 6)
- Scalability of Dell EqualLogic storage makes "forklift upgrades" unnecessary

The ability to provide business continuity in the case of a disaster is increasingly the standard by which financial services organizations are judged by their clients—especially in the Gulf South region. Hurricane season lasts from June through November, and residents know that no bank can absolutely guarantee that its data center will be spared.

"WHAT WE LIKE MOST ABOUT DELL EQUALLOGIC WAS THAT EVERYTHING WE NEEDED TO ENABLE OUR DISASTER RECOVERY STRATEGY WAS THERE—SNAPSHOTTING, REPLICATION AND A SCALABLE DESIGN."

Jonathan Wolfe, COO, Gibraltar Private Bank & Trust

Bank wire systems are complex and must be coordinated with the U.S. Federal Reserve. Until recently, providing full redundancy meant keeping racks of equipment at multiple data centers and paying for standby communication lines to the Fed. As a result, smaller banks' business continuity plans usually consisted of vaulting tapes offsite and hoping they never had to recover.

PARTNERING FOR BUSINESS CONTINUITY

South Florida-based Gibraltar Private Bank & Trust (Gibraltar Private) serves high net worth clients who pay close attention to their finances—clients who would not hesitate to take their business elsewhere if a significant interruption in service were to occur. Finding a robust disaster recovery (DR) solution that was affordable and scalable was a top priority.

"We're a private bank, so our clients are generally affluent individuals, and

they demand nothing but the best," explains Jonathan Wolfe, COO at Gibraltar Private. "Business continuity is very important to any bank, and there are a lot of issues to consider from an IT perspective."

Although Gibraltar Private's core banking systems are hosted by a thirdparty vendor, its bank wire systems are hosted at the bank's primary data center in Coral Gables, Florida, along with email, Blackberry, loan production and document imaging applications. Server virtualization combined with the right storage platform and replication software would deliver the disaster recovery capabilities the bank required, along with potential cost savings and improvements in energy efficiency. So Gibraltar Private approached Miamibased Compuquip Technologies, a Certified Partner in Dell's PartnerDirect **Enterprise Architecture program** and long-time IT service provider to Gibraltar Private, about potential solutions. The bank's requirements

HOW IT WORKS

HARDWARE

• Dell™ EqualLogic™ PS5000E iSCSI SAN arrays

SOFTWARE

- Dell EqualLogic Auto-Snapshot Manager/VMware Edition
- VMware Infrastructure 3
- VMware Site Recovery Manager
- Microsoft Exchange Server
- Blackberry Enterprise Server
- Wire Transfer software

SERVICES

 Design, implementation and support services from:
 Dell Certified Partner Compuquip Technologies, Inc. www.compuquip.com

"WITH COMPUQUIP AND DELL'S HELP, WE MET EVERY MILESTONE THAT WE NEEDED TO HIT. WE ARE NOW CERTIFIED WITH THE FEDERAL RESERVE WITH OUR SOLUTION."

Jonathan Wolfe, COO, Gibraltar Private Bank & Trust

were clear: it needed an enterpriseclass storage platform that would be reliable, scalable and cost-effective.

BUILT-IN SNAPSHOTTING AND REPLICATION

Compuquip recommended a VMware-based virtualization solution using Dell EqualLogic PS5000 iSCSI SAN arrays with 7,200 RPM SATA disk to provide affordable storage capacity for the virtual machines (VMs). One SAN would reside at the bank's primary data center, while the other would be placed at a co-location facility ten miles away.

Although the team had initially hoped to make use of some IBM storage they had on hand for the virtualized environment, they soon realized that starting fresh with Dell EqualLogic was the right way to go.

"What we like most about Dell EqualLogic storage was that everything is built in," states Wolfe. "It was the right product for what we were trying to do. Everything we needed to enable our disaster recovery strategy was there—snapshotting, replication and a scalable design. One thing we learned with some other storage vendors is that there are often add-ons they don't tell you about that you need if you want to do things like snapshotting and replication. That's not the case with Dell EqualLogic. Implementation is very straightforward, and you

know what you're getting. Once we were able to get it all on paper and know there weren't going to be any 'gotchas,' going with Dell EqualLogic was a very easy decision." Compuquip's recommendations were right on target.

REDUCING SERVER FOOTPRINT BY 80%

Gibraltar Private consolidated the 30 servers supporting its back-office applications and bank wire system onto 6 VM hosts. Three reside at the primary data center, while the other three serve as standby nodes at the colocation, ready to take over if the active site goes down. In addition, the 80 percent reduction in physical server footprint will contribute to substantial power and cooling savings.

"We saw some green savings with the server consolidation, but that wasn't the driving factor—although it's nice that we only have to pay for one rack at the colocation because of the small footprint," says Wolfe. "Our numberone goal was to enhance our business continuity plan. Especially being in a hurricane-prone area like South Florida, a financial institution just can't afford to take that kind of risk when there are solutions available like VMware and EqualLogic."

DISASTER RECOVERY IN 2 HOURS

Should the bank's primary site go down, the colocation can resume full

service in less than two hours thanks to VMware Site Recovery Manager software, which eliminates complex manual recovery steps and accelerates recovery of virtual environments.

"The most time-consuming part of recovery at this point would be the time it takes for the Federal Reserve to move the communication line for the wire system, because you don't install your own lines with the Fed—they subcontract it for you," Wolfe continues.

Previously it would have taken between 48 to 72 hours for the bank to recover using vaulted tapes. According to Wolfe, "There would have been a major interruption in service, unless we were able to work some kind of manual-type situation through the Fed's Internet portal. But even if that were the case, we still couldn't deal with the mass quantities of transactions that the wire application would be able to handle. And in the meantime, our email would be down, making communication more difficult. Luckily, that never happened, but it was an unacceptable risk."

To minimize the amount of data loss that could occur in a disaster, the Dell EqualLogic array at the active site automatically replicates snapshots of the virtual environment to the EqualLogic array at the colocation six times an hour, for a recovery point objective of ten minutes.

SIMPLIFIED ADMINISTRATION, NO FORKLIFT UPGRADES

Gibraltar Private also appreciates the simplified user interface of Dell EqualLogic storage, and the fact that as the bank's virtual environment grows, Gibraltar won't face expensive "forklift" storage upgrades.

"The ability to scale the storage cost effectively is important, especially because we have several new applications coming in that we intend to virtualize," Wolfe says. "With EqualLogic, we can just add more boxes if we need to scale out, and we're getting much more than just capacity—we're getting the controllers, power supplies and network interfaces as well."

ENHANCING "WEALTH AND WELL-BEING"

By having its new back-office infrastructure in place by hurricane season, Gibraltar Private demonstrated its commitment to its official statement of purpose: "to enhance the wealth and well-being of our clients and their families."

"Testing took more time than the actual implementation because the Fed is very stringent, but we were ready," says Wolfe. "We had very aggressive timelines, and with Compuquip and Dell's help, we met every milestone that we needed to hit. We are now certified with the Federal Reserve with our solution."









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March 2010

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