Deutsche Bank
Time-Critical Data Center Re-location

Introduction

Deutsche Bank AG is a leading international bank and financial services firm headquartered in Europe. The firm employs over 80,000 employees and serves more than 13 million customers in 72 countries worldwide. The company provides a diverse range of financial services that include sales and trading of capital market products, corporate financing, asset financing and leasing, commercial real estate, trade finance, cash management and trust and securities service businesses.

Challenges

During a planned data center consolidation, Deutsche Bank researched large-scale migration options extensively. The New York IT staff spent three months searching for a data migration solution that would meet requirements for an online, non-intrusive, heterogeneous data migration. They discovered that migration tools differed substantially in their capabilities.

Originally, Deutsche Bank had chosen a site for a consolidated data center in lower Manhattan, close to the World Trade Center. However, the intervening events 9/11 made this choice infeasible, and the company turned to an alternative site in New Jersey, not far from New York City.

Several migration tools were evaluated. These include HP Storage Apps, Veritas Volume Replicator (VVR), NSI Double-Take, Falconstor, and IP replication. IBM, a Vicom technology partner, proposed using the company's data migration solution with the assistance of Vicom's migration specialists.

Host-based software, a potential alternative to these third-party solutions, were considered, but ultimately dismissed as too error-prone. Host-based options would require installation of software on every host. Each installation, moreover, would require installing the correct operating system version, verifying and updating the system to with the correct driver level, and that all patches and updates were correct. Once the host-based migration was completed, the host software would also need to be removed from the host. Overall, the process would introduce significant operational exposure and downtime.

Solution

Before the migration project could be initiated, the IT staff would first need to qualify their solution choice. Any solution chosen would have to meet four criteria to qualify for the migration. These included:
• Perform the migration while hosts were attached and remained in production operation
• Migrate seamlessly from DAS to SAN storage systems over remote communications link without host intervention

- Verify data integrity from source location using the source host
- Provide a fall-back option for unexpected problems from the data migration

System administrators responsible for the migration chose Vicom from the only two solutions that satisfied Deutsche Bank's specifications. The project manager for Deutsche Bank explained, "It was very difficult to find a vendor with data migration services that actually worked. In fact, only one vendor other than Vicom made it to the last qualifying phase, and that vendor failed miserably in actual application."

As Deutsche Bank soon learned, Vicom's migration appliance could perform heterogeneous migrations including multiple operating systems (AIX, NT, Solaris), storage system makes (SUN, IBM, EMC, and HP) and protocols (SCSI to FC). After completion of data migration for each server, System Administrators validated migrated data against original host servers located at the New York City source site. This enabled verification before physically re-locating the servers to New Jersey. The migration was performed remotely using the high-speed link connecting the New York and New Jersey sites.

Results

The migration was performed online without business disruption, while meeting all high availability requirements. The consolidation and associated migration was proclaimed a huge success. In a single weekend, Deutsche Bank successfully re-located the data from its New York City site to its New Jersey site. Servers were then transported to the new site, resulting in a new, consolidated site without even minor interruption of service.