Success Story

First American Trust Banks on NetApp for Compliance and Disaster Recovery

KEY HIGHLIGHTS

Industry
Financial services

The challenge
Simplify data management, improve system uptime, and efficiently meet regulatory and compliance needs.

The solution
Modernize storage infrastructure with NetApp® FAS systems to support mission-critical business and database applications.

Benefits
- Zero costly outages in seven years
- $75,000 annual headcount savings via improved staff productivity
- Disaster recovery site live in less than four hours
- 40% reduction in IT time spent managing in-house data
- Ability to recover Microsoft® SQL Server™ database in 5 to 15 minutes
- E-mail recoveries in minutes instead of hours

CUSTOMER PROFILE
First American Trust Federal Savings Bank (www.firstamtrust.com) is part of The First American Corporation, a Forbes 500 and Fortune 500 company and the nation’s leading provider of diversified business information and related products. The bank, which is governed by the federal Office of Thrift Supervision and the Securities and Exchange Commission (SEC), provides two major lines of business services: commercial banking for its affiliates and a broad range of comprehensive wealth-management solutions for retail clients. First American Trust has been in business for over 40 years.

THE CHALLENGE
Provide world-class financial services availability, archiving, and regulatory compliance with a medium-sized budget
First American handles $2 billion to $4 billion a day in wire transfers. In the last three years, the company has seen the amount of customer deposits grow from $400 million to $1 billion. First American has also seen tremendous growth in transaction volume, with 100% growth in item processing and 150% growth in wire transactions. Keeping pace with growth has been a continual challenge for the IT team, because any interruption can cost the bank hundreds of thousands of dollars in interest liability. Like all financial institutions, First American is also challenged with implementing innovative technology solutions to help improve customer service. With the stakes so high, reliability and availability are not goals—they are mandates. Additionally, First American is federally regulated and must adhere to guidelines outlined by the Federal Financial Institutions Examination Council and the SEC. These guidelines require the bank to provide the same robust disaster recovery (DR) plans and ability to cull historic information as larger institutions provide, but with a fraction of the staff and budget.

THE SOLUTION
Migrate Microsoft Exchange and CRM applications to NetApp storage
To handle this volume of growth, First American set out to modernize its IT infrastructure, switching from direct-attached storage (DAS) and outsourced disaster recovery to NetApp fabric-attached storage (FAS) systems deployed in a clustered failover configuration. The decision to standardize on NetApp was simple. The bank already relied on NetApp for user home directories and was well acquainted with the value,
“When the SEC evaluated a recent merger, the NetApp solution allowed us to provide twice the information in half the time. In fact, our entire NetApp infrastructure is managed in just 10% of the time DAS would require.”

Henry Jenkins
Chief Technology Officer, First American Trust, FSB

reliability, and simplified management that NetApp offers. NetApp now supports client-facing Web-based applications, Microsoft SQL Server database servers and transaction logs, Microsoft Exchange, Symantec™ Enterprise Vault™, an e-mail archiving application, and an Onyx customer relationship management (CRM) system. Nearly all of the bank’s 130 employees use these applications, and many access the system continuously. To ensure recovery in the event of a site disaster, First American Trust mirrors data from NetApp systems at its headquarters to NetApp storage at a remote site using NetApp SnapMirror® software. Data is mirrored constantly, so the DR site is never more than 15 minutes behind. With NetApp, storage management remains less than 5% of infrastructure management and maintenance.

BUSINESS BENEFITS
Uninterrupted wire services and cost-effective compliance

In the years since its initial NetApp deployment, First American has not experienced a single serious outage, despite huge increases in transaction volumes and the addition of a new subsidiary. “Over the years, NetApp has delivered the rock-solid infrastructure needed to expand First American’s IT infrastructure and to keep pace with the company’s growing business and regulatory requirements,” says Henry Jenkins, chief technology officer at First American. “By minimizing the chance of any downtime, the NetApp systems have more than paid for themselves.”

In addition to streamlined backup processes, data recovery is notably improved. “If an end-user file is deleted or corrupted, it takes less than five minutes to recover from a recent Snapshot™ copy,” Jenkins says. “We’ve recovered entire SQL Server databases in 5 to 15 minutes.

“The NetApp systems will probably outlast every other piece of equipment in our data center,” continues Jenkins. “In fact, we’ve had to talk to the NetApp service team only three times in the past seven years, and each time the team was incredibly responsive. The reliability of our NetApp solution is unmatched.”

First American previously outsourced disaster recovery, but, since deploying NetApp, the company has found it easier and less expensive to handle DR in house. “Previously it was only cost-effective to protect our most critical information,” says Jenkins. “Creating incremental backups using Snapshot technology is so efficient that now almost every process is protected. In the event of a major disaster, our DR site could be live within four hours. This addresses both corporate and regulatory requirements.”

When it comes to compliance, NetApp has been invaluable. For example, the bank saved time and money when the SEC requested historical e-mail information for key individuals as part of a merger evaluation. “When the SEC evaluated the merger, NetApp allowed us to provide twice the information in half the time. In fact, our entire NetApp infrastructure is managed in just 10% of the time DAS would require,” says Jenkins. “Instead of spending hours on complex, time-consuming brick-level restores, we were able to easily and quickly recover even more than what the SEC asked for by using NetApp Single Mailbox Recovery [SMBR] software.” The ability to recover individual mailboxes and mail items in a matter of minutes helped First American minimize the disruption to their production environment and administration resources. Since deploying NetApp, the company has easily passed all of its annual disaster recovery tests.
The value of NetApp Single Mailbox Recovery became apparent when the SEC asked another firm for similar data. The company found that its third-party tape-outsourcing backup system was flawed and expensive. Some tapes were damaged, and in other cases backups were botched completely. In First American’s case it took one person working part-time only two weeks to obtain nine months’ worth of data; the other firm had to dedicate a full-time employee to the retrieval job for an entire month to restore only four months’ worth of data.

In addition to NetApp SMBR, First American relies on Symantec Enterprise Vault to archive, search, and retrieve critical business information in its e-mail environment. Tightly integrated with NetApp hardware and software, Enterprise Vault uses intelligent classification and retention technologies to capture, categorize, index, and store target data to enforce policies and protect corporate assets—while helping to reduce storage costs and simplify management. Drastically reducing the size of e-mail stores through compression and single-instance storage of duplicate attachments, Enterprise Vault allows users to keep e-mails without mailbox size limits. Enterprise Vault automatically replicates e-mail volumes to central online storage, moving it to less expensive storage after a designated length of time.

The NetApp e-mail archive and compliance solution allows the bank to address stringent regulatory and business requirements without overburdening the six-person IT staff. The Symantec Enterprise Vault solution reduced the manual labor required to restore, collect, and present archived e-mails from several man-weeks down to a couple of hours, resulting in dramatic cost savings. Jenkins estimates that the NetApp solution requires about 5% of one person’s time to manage; in contrast, direct-attached storage consumed about 20% of staff resources. Asked to consider what it would be like trying to administer local storage with the bank’s growing requirements, Jenkins says, “The first thing that comes to my mind is a lot of wailing and gnashing of teeth.”

Microsoft Exchange administration is simplified with tools such as NetApp SnapManager® for Exchange, which manages and verifies twice-daily automatic backups. For example, during an Exchange server upgrade, the bank benefitted from hosting Exchange stores on networked storage instead of on the same server as the application. Because databases are in a common area, the staff didn’t have to move and wipe, cutting upgrade time by more than 50%.

The flexibility of the NetApp solution has also provided First American with the solid infrastructure needed to deliver innovative technology-based service improvements to customers. The bank is implementing virtualization and a new electronic check-processing system that will result in faster check processing for customers and financial savings for the bank. “NetApp delivers the flexibility, reliability, and resiliency that we need to take advantage of the latest technologies. Because we trust and know our NetApp solution and can depend on NetApp technology continually being advanced, we can rest assured that our service offerings run smoothly now and will into the future,” says Jenkins.

Since its initial deployment, First American’s NetApp deployment has grown from just 350GB to 8TB of storage for all of the bank’s key applications. To get there, Jenkins simply refreshed the heads and added disks. “It took more time to rack the systems than to...”
“Over the years, NetApp has delivered the rock-solid infrastructure needed to expand First American’s IT infrastructure and to keep pace with the company’s growing business and regulatory requirements. By minimizing the chance of any downtime, the NetApp systems have more than paid for themselves.”

Henry Jenkins
Chief Technology Officer, First American Trust, FSB

bring them online,” Jenkins says. “We used the same disks and the same enclosure. It took 15 minutes to get up and running. It was harder to find space in the data center than to upgrade.

“One of the most impressive things about NetApp is that technology changes and upgrades are equally accessible to us, a medium-sized business, as to Fortune 500 customers,” sums up Jenkins.

SOLUTION COMPONENTS

NetApp Products
NetApp FAS3020
NetApp FAS940C
NetApp FAS820
NetApp FAS270
NetApp FAS250
NetApp SnapMirror
Single Mailbox Recovery
SnapManager for Microsoft Exchange

Protocol
IP SAN (iSCSI)

Environment
Applications: Microsoft Exchange Server 2003, Onyx CRM software, Symantec Enterprise Vault, Microsoft SQL Server 2000 and 2005
Operating system: Microsoft Windows® 2000 and 2003

NetApp creates innovative storage and data management solutions that accelerate business breakthroughs and deliver outstanding cost efficiency. Discover our passion for helping companies around the world go further, faster at www.netapp.com.