

NexentaStor™ Unified Storage

Financial

Challenge

Scalability. Improve Service Quality and Agility. Storage Right-sizing. Cost.

Benefits

NexentaStor spreads I/O workload, leveraging SSDs. Data compression and thin provisioning provide greater storage space efficiency.

Solution

NexentaStor 3.1.2

THE FINANCIAL SECTOR

Nexenta works with some of the most diversified financial services companies in the world. These companies offer a full range of product solutions for individual investors, employers, and institutions.

Their basic business mission is to help customers and clients achieve financial objectives. For example, one Nexenta customer has more than \$3 trillion in assets under administration, including managed assets of more than \$1.5 trillion (end 2011).

Another customer in the Finance sector is one of the largest global mutual fund companies, a leading provider of workplace savings plans in the U.S., and a top-level provider of Individual Retirement Accounts (IRAs).

These accounts, showcasing just one organization, provide brokerage services, retirement planning, portfolio management, along with other financial products and support, to more than 18 million individuals and to more than 5,200 financial intermediary firms.

As you can well image, the entire financial sector is behemoth, providing enormous opportunities to storage vendors who can supply scalable, flexible, cost-effective, and secure solutions.

CHALLENGES

More so than many other industries, Financial organizations are dealing with the explosion of financial information, data centers, corporate mailboxes, and the ordinary day-to-day dealing of thousands of employees. Data created, for just one of these companies, comes from many areas of business: employees with personal computers, 3,000 different applications, more than 12PB of in-house data needing storage, 17,000 mobile devices, 9,000 servers, government compliance and regulations, and more than 50,000 personal computers.

The issue becomes how do you store this data, how do you make it secure and accessible, and how do you plan for both the short- and long-term needs of a company with exponential data growth.

Specifically, financial services providers need to address issues such as:

- Supporting business growth on declining storage budgets and headcount allocation
- Poor storage utilization
- Storage scaling and virtualization ratios are constrained by network-based backup and recovery
- Performance takes a hit as server and storage virtualization concentrate on I/O workloads

NexentaStor

- 128-bit file system
- Two Supermicro appliances with 100TB raw storage and 40TB of usable storage, deployed as VM storage (using iSCSI and NFS) and NAS (using CIFS)
- Incumbent storage solution with 20TB utilised as VM storage
- Four 10Gb multimode connections (two for iSCSI and two for CIFS and NFS)

“Finance is different. Time literally is money. I’m extremely proud that some of the world’s leading financial service firms are trusting Nexenta for a broad range of use cases, including messaging, trading, back-up, private cloud, and disaster recovery. Our product, our use of SSDs, our business model, and our team are working together to transform the market for unified storage in global financials.”

Evan Powell
Nexenta Systems

SOLUTION OVERVIEW

The overarching story for the financial sector is how to develop and implement an updated, comprehensive, long-term storage solution that:

- Increases scalability
- Improve service quality and agility
- Flexibility to right-size storage needs
- Reduces costs and deals with dwindling headcount
- Makes data accessible so that businesses can address all local, state, and federal compliance rules

Nexenta's hardware-agnostic, software solution addresses these issues head-on, dealing with data dispersion, compression and thin-provisioning, accessibility, and a pricing structure that just flat-out embarrasses legacy vendors.

Cloud Storage Efficiency: One financial customer uses about 150TB of storage for cloud. Thin provisioning, deduplication, compression, reservations, and quotas reduce capacity requirements while lowering costs by up to 70%. For private clouds, NexentaStor flexibility handles IOPS with SSDs.

Virtualized Storage: Supports multiple workloads on a single, scalable architecture. Unifies storage management for VMware, Citrix Xen, and Hyper-V.

Scale Up, Scale Out: For one financial services provider, NexentaStor runs 2PB of messaging infrastructure based upon Microsoft Exchange. **Operational Simplicity:** Single console management, monitoring, real time analytics, DTrace, availability alerts, REST APIs, unlimited snapshots, and cloning.

BUSINESS BENEFITS

Allied to Nexenta's hardware-neutral approach, pooling and tiering storage enables financial institutions to use highly efficient, fast SSDs for high performance SQL servers to ensure rapid read and write for the customer-facing side of business.

As NexentaStor is based on OpenSource technology, users are not locked in to buying more expensive products from a particular vendor or paying unnecessary mark-ups for standard features.

NEXENTASTOR USE CASES FOR THE FINANCIAL SECTOR

- Archiving, Business Continuity, Backup
- Deduplication
- Cloud
- File sharing, internal usage
- Trading, virtualization, database back-end

Typical System Configuration

- Nexentastor 3.1.2
- HA Plug-in
- 192GB memory per head (ARC)
- 2 Supermicro 825TQ-R700LPB chassis
- 2 Supermicro X8DTH-iF motherboard
- 8 Supermicro JBODs
- 8 STEC 8GB Zeus RAM (ZIL),
- 8 STEC 200GB Zeus IOPS mlc (ARC2)
- 8 STEC 400GB Zeus IOPS slc (Volume provided for high I/O SQL Servers) in mirror config
- 164 Seagate 300GB 15K RPM SAS in mirror config
- 4 Seagate 300GB 15K RPM SAS
- 2x 10Gbps Ethernet