Centralized Storage Plan

Sufficient Evidence Pointed to Litigation Firm's Need for a Consolidated Storage Solution

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Company Overview

- National litigation law firm founded in 1975
- Headquartered in Washington, DC
- 5 east coast offices
- Range of practice areas including
  - Commercial law
  - White collar crime
  - Goverment ethics
  - Securities
- Finalist in Litigation Boutique of the year by the American Lawyer
- Centralized IT staff

Technical Challenges

- Storage proliferation
- Litigation data growth rates
- De-centralized data environment
- Local redundancy with tape backup only
- Management challenges of large infrastructure with limited staff
- Increasing difficulty meeting backup windows
- Firm looking for BC/DR protection

Infrastructure Crossroads

- Equipment due to go back on lease
- Current design increasingly difficult to sustain
  - Cost vs utilization
  - Physical space
  - Environmental concerns
  - Administrative requirement for local and remote infrastructure
  - Green initiative

Our Approach
DAS vs. SAN

- Direct attached storage
  - Silos of storage
  - Inefficient storage utilization
- SAN centralized storage
  - Rapid scalability
  - Centralized management
  - Inherent redundancy
  - Future proofing

Our Approach
Virtualization

- Common pool of computing resources
- Higher utilization of more robust resources
- Reduced physical footprint
- Centralized management
- Large advantages in SAN environment

Our Solution

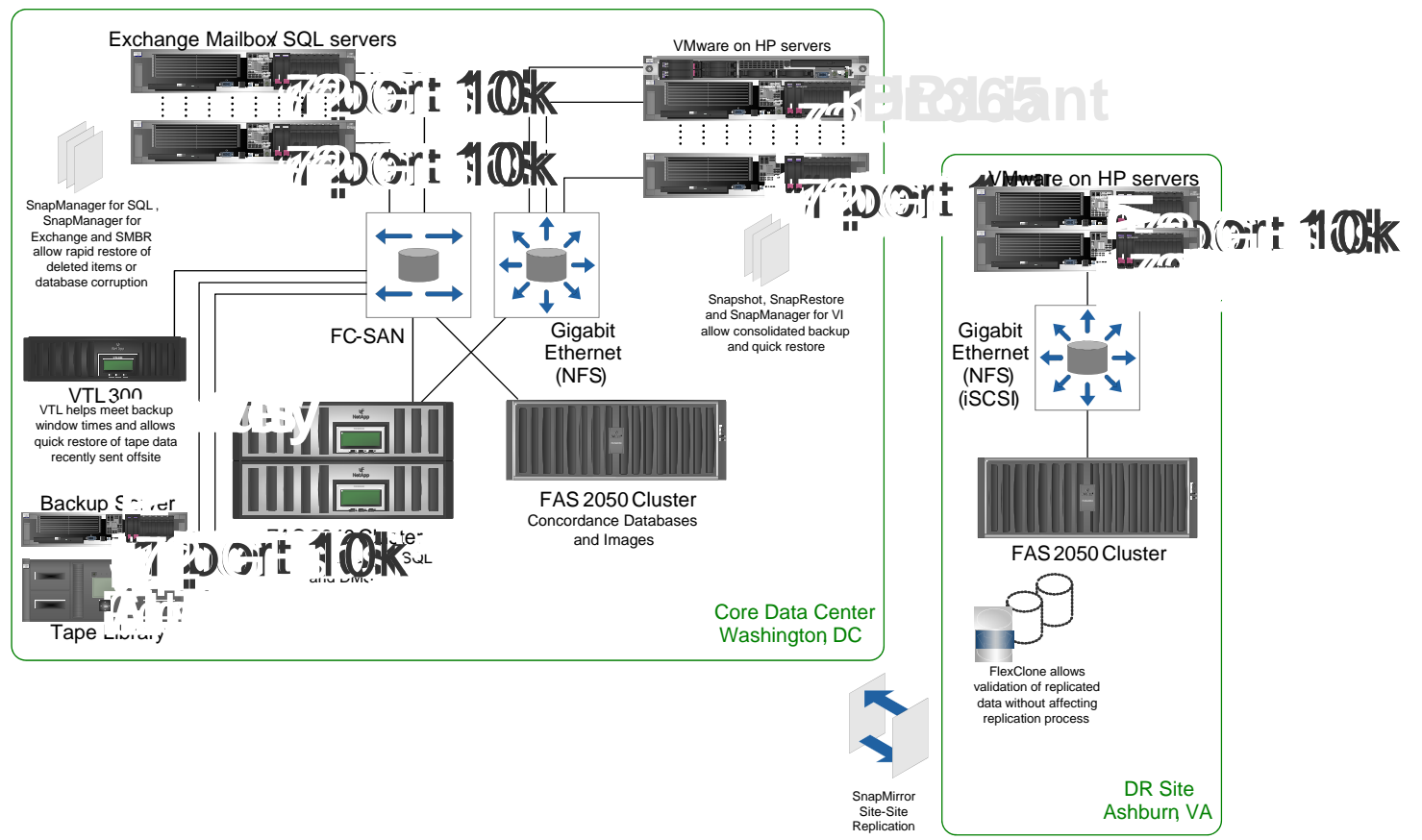- SAN centralized storage
- Virtualization
- Virtual Tape Library

Technology Overview

Exchange Mailbox SQL servers

VMware on HP servers

SnapManager for SQL , SnapManager for Exchange and SMBR allow rapid restore of deleted items or database corruption

FC-SAN

Gigabit Ethernet (NFS)

Snapshot, SnapRestore and SnapManager for VI allow consolidated backup and quick restore

VTL 300
VTL helps meet backup window times and allows quick restore of tape data recently sent offsite

Backup Server

FAS 2050 Cluster
Concordance Databases and Images

Tape Library

Core Data Center Washington DC

VMware on HP servers

Gigabit Ethernet (NFS) (iSCSI)

FAS 2050 Cluster

FlexClone allows validation of replicated data without affecting replication process

SnapMirror Site-Site Replication

DR Site Ashburn, VA

SAN Centralized Storage

- Consolidate file services
- Single shared pool of resources with redundancy
- Simple management console
- Consolidation of email resources
- Scalable storage options to meet litigation data demands

Virtual Infrastructure

- Centralized storage means added protection from host system failure
- Clustered host functionality
- More efficient utilization of equipment
- Administration from unified console
- Rapid virtual server deployment
- Reduced downtime

Virtual Tape Library

- Faster backups to disk-based storage
- Ability to off load backup data to tape anytime
- Reduction in requirement to retrieve offsite tapes equating to cost savings

Added Benefits

- Ease of lease returns
- Unified SAN administration
- Increased UPS runtimes
- Minimal remote infrastructure
- Development / testing environment similar to production
- Increased Server Performance
- Snapshots
- De-duplication

Business Continuity

- Site-Site replication
- High availability with SAN cluster and redundant VMware hosts
- Snapshots and replication insure 2-hour RPOs
- WAN acceleration dramatically increased replication throughput

Summary

- 99.99% uptime for critical applications
- 24x7 availability of MS Exchange
- 95% reduction in RTO, < 2-hour RPO guaranteed
- De-duplication reduced litigation storage by 35% and VMware by 68%
- 30% decrease in data center footprint

Wrap Up

- What would we do differently
  - Get Virtual servers at same time
  - Explore SAN options thoroughly at purchase time
  - High-performance network infrastructure required
- Questions?