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### Challenges and Solutions Allocating Storage in a SAN Environment Bruce Naegel VERITAS

THE DATA AVAILABILITY COMPANY™



## **Overview of Paper**

- Challenges in Allocating Storage
- **Types of Storage Networks**
- SAN Storage Networks
- Example System
  - Data Acquisition System
  - Data Analysis System
  - Data Sharing between these systems
  - Storage for Archived Records
- Summary of Methods



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## **Types of Storage**







Direct Connect

SAN based Network

NAS Solution

- Advantages of each type of storage
- Centralized storage and distance with WDWM
- Unified Storage Network Evolution



SAN Benefits (throughput)

#### Challenges in Managing a SAN

- Asset Management
- Capacity Management
- Configuration Management
- Performance Management
- Availability Management
- Policy Management
- QoSS



## **Data Acquisition System**





Zone for Data Acquisition

- High Availability and Replicated Distance (WDWM)
- Separation between Windows Servers
- Storage Appliance allocation method



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# **Data Analysis System**



- Performance Separation
- "Snapshot" between acquisition and analysis
- Safeguards with zoning between sections



### Conclusions

- Creating a redundant replicated system
- Supporting File based triggers
- Storage Appliances or Global Allocation
- Data Acquisition in separate zones
- **Transfer Acquisition to Analysis**
- Snapshot for on line data capture
- Storage Allocation to
- SAN based File Systems (Cluster or otherwise)



### VERITAS Products that work in SAN Environments

- VERITAS Volume Manager
- VERITAS Cluster Server
- VERITAS Volume Replicator
- VERITAS SANPoint Control
- VERITAS SANPoint Foundation Suite HA
  - Cluster File System
  - Cluster Volume Manager
  - VERITAS Cluster Server
- VERITAS
- VERITAS ServPoint Appliance for NAS
- VERITAS SERVPoint Appliance for SAN
- VERITAS NetBackup SSO and VERTEX