Bringing the Benefits of Hyperconvergence to Secondary Storage

SNIA – Data Storage Innovation

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Who Am I?

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• Infrastructure & Datacenter
• Financial | Healthcare | Gov’t
• Consultant | Admin | Engineer
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How Did We Get Here? Client-Server Era
Virtualization Era - Cloud Era
Ecosystem Evolution
The Storage Iceberg

- Fragmented
- Inefficient
The Storage Iceberg

- Fragmented
- Inefficient
- Dark Data
Hyperconverged Secondary Storage

#HCSS
Hyperconverged Scale-out Target Storage

Primary
- Physical Servers
- Virtual Machines
- Databases

Master Servers

Gateway

Target Storage

Cloud
- Analytics
- Test/Dev
- File Shares

Tape Library
Consolidate with Hyperconvergence!

✓ Simplicity
✓ Control
✓ Efficiency

- Analytics
- Test & Dev
- File Shares
- Data Protection

Cohesity Data Platform
Cohesity | C2000 Series

Chassis: 2U, 4 HA Nodes

HDD Storage: 96 TB
Flash Storage: 6.4 TB
Network: 10GbE

Benefits of Commodity:
✓ High performance
✓ Off-the-Shelf Components
✓ Cost-effective
✓ Scale-out
✓ Shared-nothing Architecture
Cohesity | Distributed File System

QoS  |  NFS  |  SMB  |  Replication
Compression  |  Global Deduplication  |  Encryption
Data Journal  |  SnapTree  |  Metadata Manager
Disk Manager  |  Data Mover  |  Self-Healer
Lock Manager  |  Distributed Key-Value Store

OASIS

Cohesity Data Platform
Cohesity | Data Protection

- Many Sources
- Virtual & Physical
- Instant Restores
- Integrated Orchestration
- Policy-driven EVERYTHING!
Cohesity | File Shares

- Data Inherently Protected
- Global Dedupe | Compression
- Active Directory Integration
- Native File and Object Protocols
Cohesity | Test & Dev

- Orchestrated Build & Teardown
- Rapid Cloning

- Bulk Provisioning
- Customization
- Cohesity as Datastore

Test & Dev

File Shares

Data Protection

Cohesity Data Platform
Cohesity | Analytics

- Compute + Storage
- Native MapReduce
- In-Place or External Sources
Cohesity | Nirvana!

Cohesity Data Platform

- Data Protection
- File Shares
- Test & Dev
- Analytics
- HYPERCONVERGED Secondary Storage

✓ Web Scale
✓ Global Dedupe
✓ Single Pane of Glass
Cohesity | Rich Cloud Integration

- Long-term Archival
- Automated Tiering
- Remote Replication
Cohesity | Archival

Local Backups

COHESITY
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COHESITY
COHESITY
COHESITY
COHESITY

Policies

In-Flight Encryption

At-Rest Encryption

Tape Library

Offsite Tape Vault

Replication
Cohesity | CloudTier™

- Cold data moved to cloud
- Policy-driven thresholds
- Absorb capacity bursts
Cohesity | Cloud Replication

- Run Cohesity software in the Cloud
- Cohesity <--- Cohesity Replication
- Active failover to the cloud
Traditional Secondary Storage

Primary Storage
- Physical Servers
- Virtual Machines
- Databases

Master Servers

Media Servers

Target Storage

Gateway

Cloud

Secondary Storage

Test/Dev

File Shares

Analytics

Primary

Virtual Machines

Databases
Cohesity | Hyperconverged Secondary Storage

Primary

- Physical Servers
- Virtual Machines
- Databases

Primary Storage

Analytics

COHESITY

COHESITY

COHESITY

COHESITY

Replication

Cloud

Test/Dev

File Shares

Agents/API

VADP

Integrated Adapters
THANK YOU!