A New Strategy for Data Management in a Time of Hyper Change
Everyone Claims to Do Data Protection
In Medium to Large Enterprises, traditional backup is today’s preferred approach to protecting critical data.

Traditional backup strategies being stressed by combination of:

- Data growth & Diversity
- Tighter RPO/RTO
- Cloud, SaaS, Mobile
- IT as a Service

The451, April 2014
Moore’s Law (extrapolated) & DP Software Pricing

If Data Protection Software Costs More Than Primary Disk, Why Buy DP Software?

Ave Price Per TB

-9% CAGR

-25% CAGR

Array $$/TB

DP SW $$/TB

Differences Between Native and Data Protection

The Data Protection Copy

- Must be Richly Indexed and Cataloged
- Must be Storage & Network Efficient
- Must be Extremely Scalable (Internet of Things Ready)
- Must be Infrastructure & Storage Agnostic
- Must be OPEN – Eliminate Silos for Different Uses
Data Protection Strategy For the Future
Must Cover Many Diverse Infrastructures & Architectures
Major Shift in Data Protection Strategies

By 2016, over one-half of Customers will be leveraging Snaps, Replicas or Native Format Copies for Data Protection

Even more reason for richly indexing and cataloging Native Format copies for Data Protection
IntelliSnap Mechanics

Snapshot Copy
- Application agents prepare application for snapshot, and invoke hardware snaps
- Snapshots intelligently indexed for granular recovery
- Recovery optimized for rapid restores

Off Array Copies
- Off-host mounting of snapshots to eliminate product host load
- Translates hardware snapshots into native application full/incremental backups for minimal daily data movement
- Deduplicates data to minimize footprint and allow for efficient movement of data to remote deduplication stores

Long-Term Retention
- Copies data to removable media or cloud storage for long term retention
By 2016, Customers will Spend Almost as Much of Protecting Their Virtual Environment as on VMware & Hyper-V

<table>
<thead>
<tr>
<th></th>
<th>E2014 Revenue</th>
<th>E2016 Revenue</th>
<th>CY12-C16 CAGR</th>
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<tr>
<td>Server Virtualization</td>
<td>$5.84B</td>
<td>$6.87B</td>
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<td>Data Protection</td>
<td>$3.70B</td>
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<td>I/O Virtualization</td>
<td>$0.48B</td>
<td>$0.72B</td>
<td>29%</td>
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VMware Protection

**Description**

- VADP Integrated Backup and Recovery with no impact on production servers or virtual machines

**Features**

- Faster Backup and Recovery: Eliminate the impact of backup on production servers
- Multiple backup options: disk level, file level and volume level allowing greater flexibility in protection policies
- Fast Incremental Backups: Leverage Change Block Tracking for low impact incremental
- Multiple restore options: Full VM Restore to and Granular File Level Restore from a single pass backup. No restaging on disk required
- Flexible Deployment Options: Deploy in Virtual Machines for minimal additional servers overhead or on physical servers.
- Embedded Deduplication: Embedded source side deduplication for minimal data transfer at scale for even faster backups lower impact on infrastructure
Hyper-V Protection

Features

- **Live Migration**: Allows the migration of running virtual machines with no down time.

- **Dynamic Memory**: Memory can be dynamically reallocated between different virtual machines in response to the changing workloads. Allows for higher consolidation rates.

- **Multiple OS Support**: 32 and 64 bit support for Windows & Linux.

- **Virtual Machine Snapshot**: VSS consistent Backup and revert.

- **High Availability**: Should a host be lost VMs can be automatically restarted on available hosts.

- **Cluster Node Connectivity Fault Tolerance**: Should a cluster node lose connectivity to backend storage all IO can traverse the front end network.
Mobile Pushing Data to the EndPoint

More Mobile Devices than People in the World

Need to Protect the Data at the Edge, just like at the Data Center Core

Cannot protect data at the endpoint without integrating management of the device
Protect the Edge

- Simple to Deploy
- Secure, Low Impact
- Consolidated Mgmt
- Centralized Management
- HTTPS or VPN
- End User Self-Service Options
- Simpana ContentStore

ACCESS

- Remove the Helpdesk
- Eliminate Downtime
- Extend to eDiscovery
MANAGED DATA IS NOW AN ASSET

Users can find and access for Recovery, Reporting, eDiscovery, Compliance and Data Mining.

- Analyze what you need to keep, improve efficiencies and decision making with unparalleled insight into data.
- Enable proactive legal and compliance discovery workflows with a single collection and single pane of glass management.
- Search all managed data across applications, devices, file shares and locations.
- Secure, self-service access from anywhere and from any mobile device improves productivity.
- Accelerate application-aware recovery and eliminate scripting with the industry's broadest backup, recovery and replication integration with array based snapshots.
- Transform the value of your data by retaining only what has Business, compliance or evidentiary value.

Scalable implementation across enterprise, mobile, cloud and as a hybrid solution that can be deployed anywhere with enterprise management, replication integration with array based snapshots.
Questions
THANK YOU!