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Highlights:
Simpana® IntelliSnap™ technology harnesses the power of array-based snapshots to accelerate backup & recovery

1. **Modernize Data Protection and Recovery**
   Converge application aware backup and snapshot management in multi-vendor storage environments

2. **Maximize the value of hardware investments**
   Eliminate scripting and automate application aware snapshot and recovery operations across 95% of the leading storage arrays

3. **Reduce Backup Windows**
   Create application-consistent snapshot-based backup copies without impacting production

4. **Improve Recovery Time, Application Availability**
   Index, search and recover directly from snapshots or backup/ archive storage tiers with automated log playback

5. **Improve IT Efficiency**
   Eliminate snapshot-related scripting and management complexity, execute more frequent snapshot operations to improve DR readiness, align to more stringent SLAs and accelerate test/dev operations

6. **Reduce IT costs**
   Eliminate multiple point products and management silos with a single software platform

Simpana® IntelliSnap™ Snapshot Management Technology: Exponentially Accelerate Data Protection and Recovery

The Challenge: Realizing the Potential of Array-based Snapshots

Enterprises today increasingly turn to array-based snapshots to augment or replace legacy data protection solutions that have been overwhelmed by exponential data growth. The challenge is that native array snapshot tools – and alternative 3rd party solutions – have varying degrees of functionality, automation, scripting requirements, hardware support and application awareness. These approaches can add administrative complexity and make it more difficult to realize the full potential of snapshots – especially in heterogeneous storage environments.

Storage Integrated Operations with Simpana IntelliSnap™ Technology

CommVault solves this problem with Simpana IntelliSnap technology. IntelliSnap provides snapshot management across 95% of the industry's top storage arrays. IntelliSnap technology streamlines and simplifies snapshot management; centralizes snapshot management across heterogeneous storage platforms; automates object, application and database recovery; and links snapshots to backup processes. The tight coupling of managed snapshots with data protection and recovery operations enables Simpana software to provide a complete view into data across applications, devices, operating systems and locations, cutting administrative overhead and improving access, availability and IT efficiency.

Automated Snapshot Management

Simpana IntelliSnap technology enables a modernized approach to data protection by merging storage system hardware snapshots directly into the data protection process. IntelliSnap technology integrates tightly with both host applications and with the system software specific to each hardware array. As the central integration point between the two, the IntelliSnap feature drives snapshot creation, indexes the contents, and can then push application consistent backup, archive or DR copies to secondary storage. IntelliSnap technology normalizes snapshot operations so they look the same and operate the same way regardless of application or storage platform. For longer term retention copies, Simpana software offloads deduplication, backup and encryption to a separate host to minimize impact to production systems.

By automatically integrating application intelligence with hardware snapshots, Simpana software is able to reach through the application and file systems into the storage array, discover volume/disk configurations for the snapshot operations, and coordinate these operations with proper application awareness – minimizing administrative configuration and eliminating any scripting requirements.

Orchestrated Recovery

Simpana software's index spans all snapshot copies under management, enabling intuitive search and granular recovery within and across all snapshots – whether on a single array, multiple arrays, or on arrays from different vendors. Simpana IntelliSnap technology also automates database and application recovery across snapshots and secondary copies. For example, to recover a database that is snapped every 6 hours, with log backups every 30 minutes and a backup to secondary storage once a day: simply select the database and a point in time to recover to. Simpana software will either copy back from a secondary copy or revert to the snapshot – and then automatically replay the logs to bring the database back in a consistent state to the selected point in time. Simpana software orchestrates the entire process between hardware and host.

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Key Capabilities

- **Simplify, automate and standardize all snapshot management tasks**

  Configure, create, retire, mount, mine, dismount, monitor, retain, revert, restore in the same way regardless of hardware platform

- **Policy-based snapshot management**

  Eliminate need to script snapshot operations

- **Accelerate test and dev**

  Automate the creation of writable copies to accelerate dev/test operations

- **Consolidate recovery management**

  Provide array-assisted recoveries, database/volume level restores, and granular file, message, SharePoint document or Oracle table recovery from any tier (snapshot, backup, archive or DR) to any target system

- **Integrate Security & Reporting**

  Initiate backup operations from hardware-based snapshots with rich job- and array-specific reports and analytics, with integrated auditing and security controls

- **Hardware-agnostic data retention**

  Align independent retention policies and provide application-consistent recovery copies across different storage types and tiers

Streamline Replication, Accelerate Test / Dev Operations

For select arrays, IntelliSnap technology can simplify disaster recovery and test/dev operations by managing array-based replication and the creation of writable snapshot copies. IntelliSnap technology can manage array replication to create more frequent, more current DR copies – with full application awareness and granular recovery capabilities. The IntelliSnap feature can also create test/dev copies at the DR site, offloading test/dev from the production environment and eliminating the need for manual operations, labor-intensive refreshes, and scripts – significantly reducing overhead and accelerating test/dev operations.

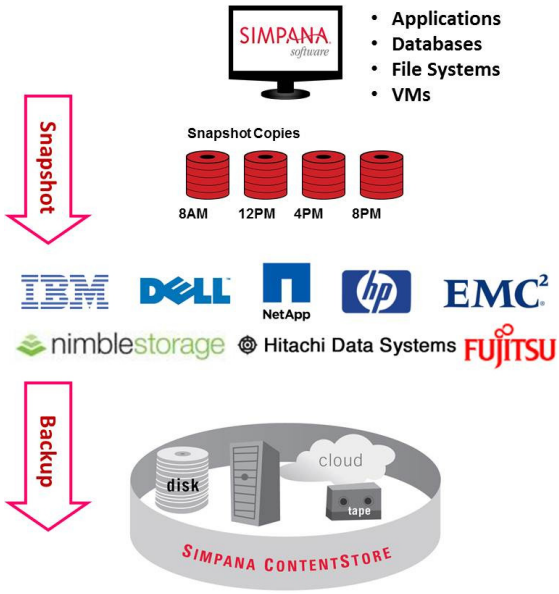

Figure 1:
A singular approach to modern data protection: Policy-based management of heterogeneous hardware snapshots linked to application-aware backups with Simpana software and IntelliSnap technology.

Applications and File Systems Supported by IntelliSnap Technology
DB2
Lotus Notes
Microsoft Exchange Server
Microsoft Hyper-V
Microsoft SharePoint Server
Microsoft SQL Server
Oracle
SAP
VMware
Microsoft Windows File Systems
Linux & UNIX File Systems

Hardware Arrays Supported by IntelliSnap Technology
Dell Compellent, EqualLogic, PowerVault MD
EMC Celerra, CX, DMX, VMAX, VNX
HDS AMS, HUS, USP/VSP
HP 3PAR, EVA, XP
IBM DS Series, N-Series, SVC & XIV
Fujitsu ETERNUS
NetApp E-Series, FAS
Nimble CS Series
Oracle/SUN LSI
CommVault Replication Enabler

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For more information about Simpana® software modules and solutions, and for up-to-date system requirements, please visit www.commvault.com

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