



Introducing Simpana® 9

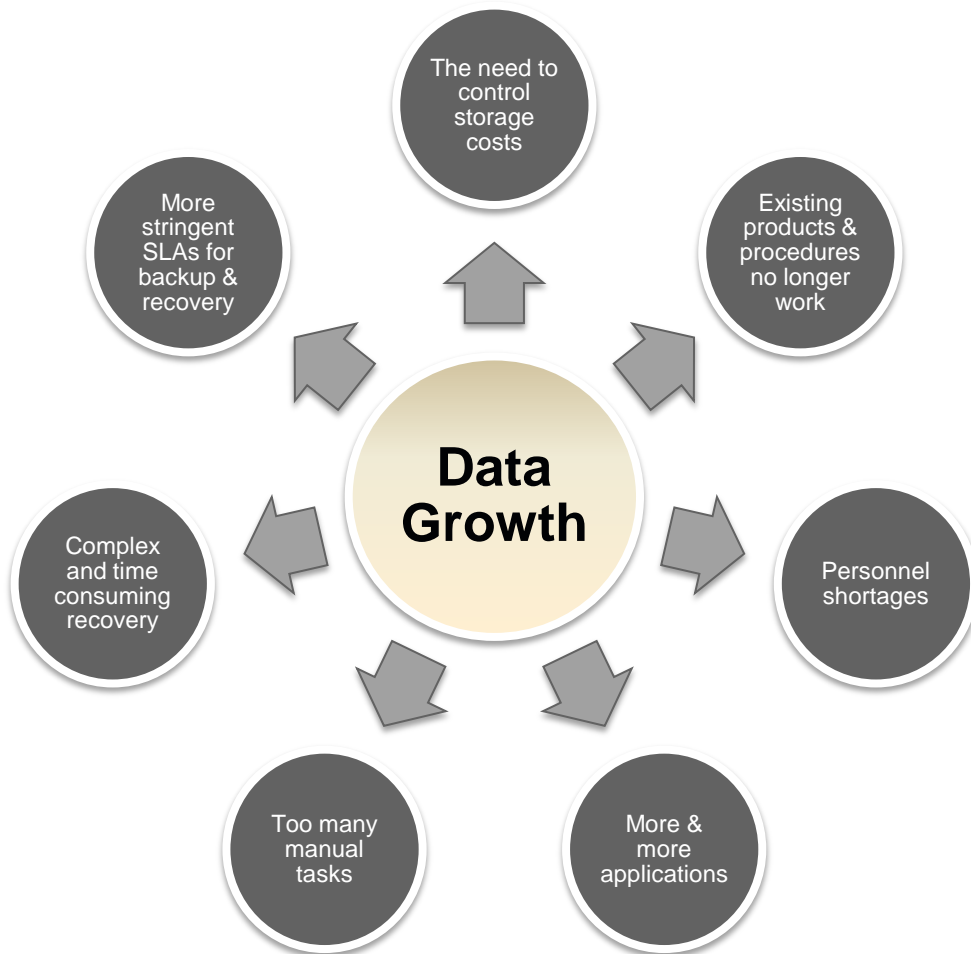
**Groundbreaking Technology that Revolutionizes
How You Manage and Protect Data**

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Data Management Challenges

Legacy software makes it hard and often broken





Gartner View on Backup

“ ...a common discussion with organizations regarding backup often centers on the need for improved solutions that will not only incrementally improve the overall state of backup, but dramatically improve it. Organizations are voicing their opinion that backup needs to improve a lot, not just a little. **This is leading to an increased willingness to switch backup vendors. The implication with the rising frustration with backup is that data protection approaches of the past may no longer suffice in meeting current, much less future, recovery requirements.** ”

Gartner

Best Practices for Addressing the Broken State of Backup

August 27th, 2010

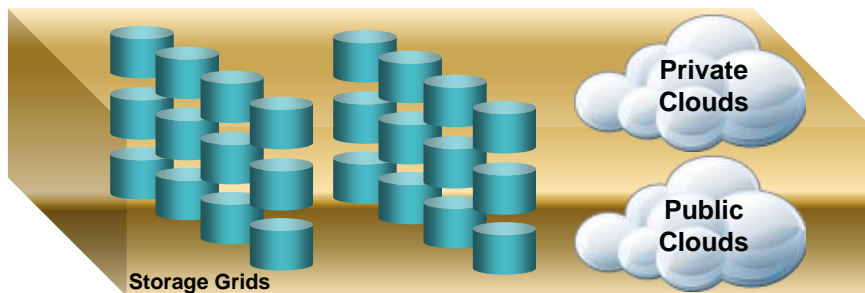
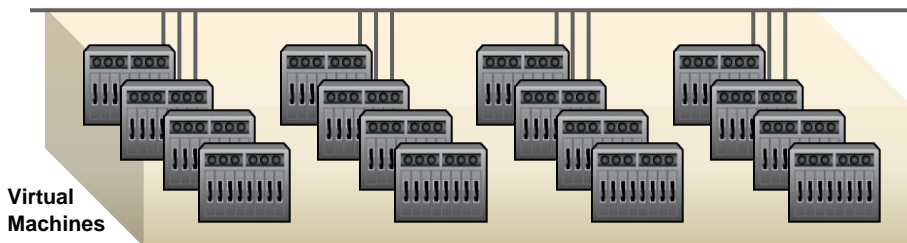
Tomorrow's Data Center

Data Management Only Gets Harder and More Complex in the Future



Future

Virtualized / Storage Grids / Clouds



- ▶ Accelerating data growth
- ▶ Extreme virtual environments
- ▶ Storage grids
- ▶ Private & public clouds
- ▶ More data to retain and manage

Legacy data protection products and techniques often complicate the transition



The Clock is Ticking

Can You Afford **NOT** to Modernize?



Modernization with CommVault

Simpana® software serves as a **bridge** to help customer get from where they are to where they need to be in the rapidly transforming IT landscape.

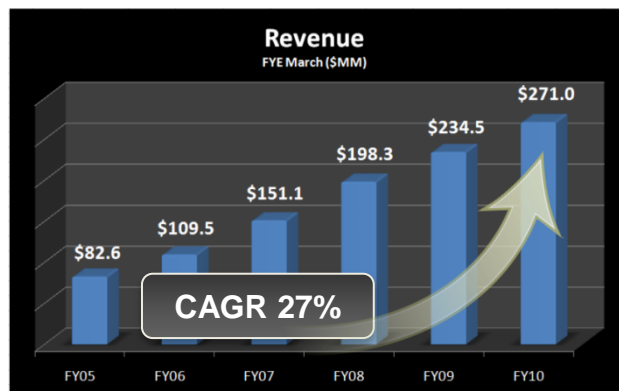
- ▶ The bridge to implementing an integrated modern data and information management strategy.
- ▶ The bridge between physical and virtual server data management.
- ▶ The bridge to an available, reliable, robust cloud.
- ▶ The bridge easing migration from obsolete legacy configurations to a modern infrastructure.



Proven Track Record of Success

CommVault simplifies and makes it less costly to **manage**, **access** and **protect** data in physical and virtual environments

- ▶ HQ in Oceanport, NJ
- ▶ More than 1,100 employees worldwide
- ▶ Global sales, service and support
- ▶ > 13,500 customers
- ▶ Highest customer satisfaction rate in the industry
- ▶ Publicly traded on NASDAQ:CVLT \$1B market cap

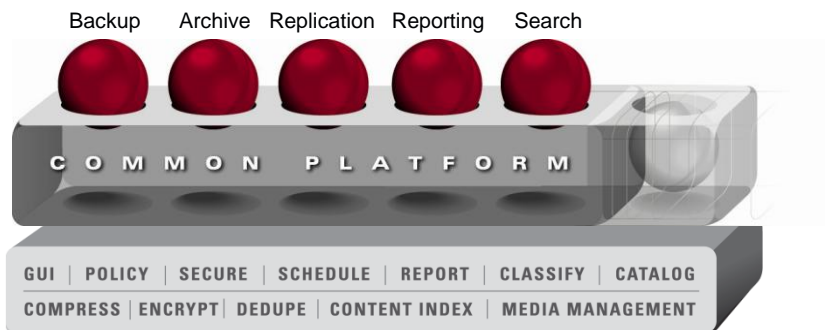


COMMVAULT SYSTEMS INC.'S Simpana suite of data protection apps is beginning to look like the 1927 New York Yankees of enterprise backup and recovery software, with yet another impressive win in our Quality Awards service and reliability survey. Users gave the company's flagship product the highest scores in four of the five rating categories on our survey and put CommVault back into the winner's circle for the fourth time in the five rounds of our survey. "CommVault is hands-down the best software I've ever encountered," noted one very pleased respondent.

Industry-leading Technology & Support

Simpana® Software

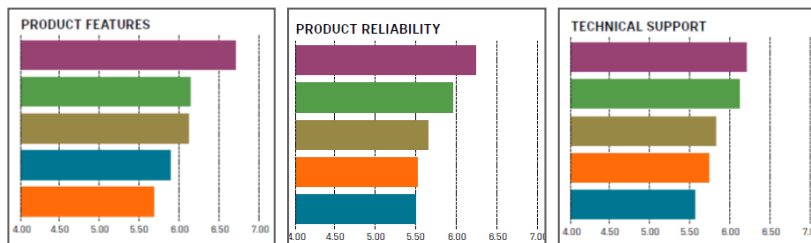
Unifies data management within a single product



- ▶ Works how we say it will
- ▶ Delivers integrated, complete lifecycle management
- ▶ Easy to deploy and manage
- ▶ Simple recovery
- ▶ Outstanding features and reliability

2010 Storage Magazine Quality Award

■ CommVault Systems Inc.



“CommVault sets benchmark in 2010 with **97%** customer satisfaction rating ***

*** Industry average 75% per HDI 2009 Practices Survey





What Our Customers Say

"We were able to demonstrate how switching to Simpana software would **produce a projected savings of more than \$10 million over 3 years**. CommVault software gave us the best of both worlds-centralized backups and scalable, affordable deduplication utilizing less-expensive disk."

First National Bank

"We've projected **IMG will save more than \$1 million over 3 years** by replacing our existing solutions with Simpana software."

IMG

"We expect to reap significant operational efficiencies and cost savings from being able to centralize administration of backup and recoveries from our dispersed offices. Adding deduplication to the mix also is a big plus as **we are expecting to reduce up to 90% of United Water's backup and archive data currently stored on disk and tape.**"

United Water

"We've been able to **reduce storage costs by up to 75%** by moving older emails onto more economical SATA storage."

Ellis Medicine

"Texas Tech has achieved a **reduction in its overall tape and disk storage costs by up to 40% and has stated it uses approximately 80 percent less disk for backup data.**"

Texas Tech University

"We project a **12-to-18 month ROI** and forecast **a savings in storage-related costs of more than \$1M over a four year period.**"

CI Investments

"...the team claims that this allows their IT department to improve application performance and **cut unnecessary administrative overhead from 45 minutes a day to less than 30 minutes a week.**"

Cleveland Indians

"With Simpana software, the company (BT) gains a more flexible, scalable solution **which BT expects will deliver greater management visibility for better control of its massive environment**, which includes more than 6 PBs of data and a large-scale Oracle deployment."

BT

Introducing Simpana 9

Revolutionary Technology to Help IT Modernize



Simpana 9 delivers significant enhancements to **improve operational efficiency, agility and reduce storage costs.**

Gen 3 Virtual Server Data Protection

- ▶ Massive scalability & automated, near instant backup of hundreds of virtual machines in minutes



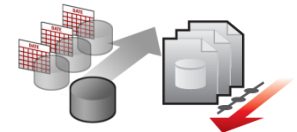
Data Reduction

- ▶ Gen 3 deduplication reduces the amount of data backed up and sent across networks by up to 95%.
- ▶ Reduces backup windows by > 50%



Modern Data Protection

- ▶ Advanced data protection, including new platform support, backup copies with staggered retention periods, mining & new recovery capabilities



“Fast Pass” Migration & Simplified Administration

- ▶ “Fast Pass” migration for Symantec NetBackup and IBM TSM customers, next-generation licensing model, electronic download capability, etc.



Bridging the Gap

Modern Data Protection for Physical and Virtual Environments

Simpana® software bridges the gap for both physical and virtual environments by delivering industry-leading, modern data protection with a single product.

Centrally managed, scalable, automated modern data protection

“

”

Using separate solutions to manage and protect physical and virtual systems can be inefficient and lead to additional management overhead while introducing complexity into the recovery process. In our research, it appears that organizations are aware of this trade-off, which is why the overwhelming majority cite a preferred approach of using a single backup application for both virtual and physical environments.

- Lauren Whitehouse, senior analyst, Enterprise Strategy Group:



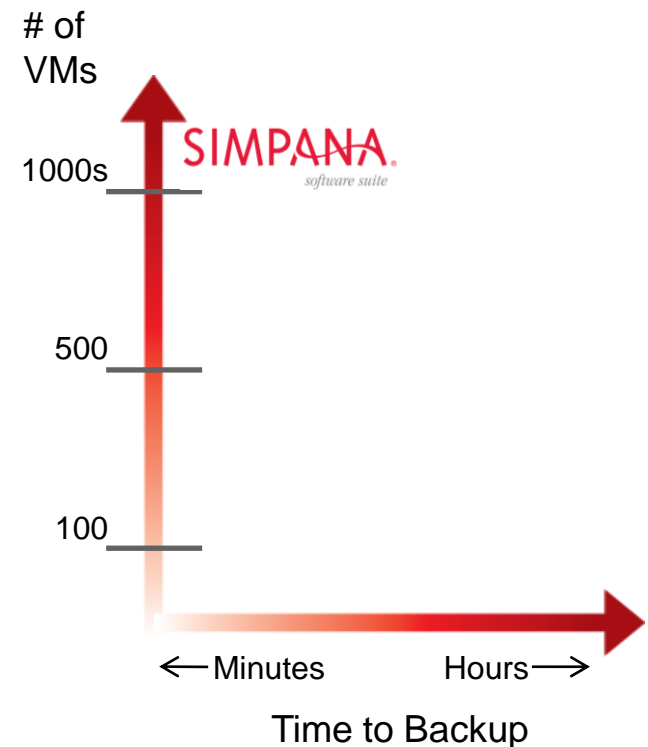
Modern Data Protection for Virtual Environments with Simpana 9



ONLY Simpana 9...



- ▶ Scales to support 1000's of VMs
- &
- ▶ Delivers near-instant backup of 100's of VMs and applications within minutes
- &
- ▶ Revolutionizes how easily administrators can recover VMs, applications and data stored across tiers of storage and tape



Wait...there's a lot more!

Modern Data Protection for Virtual Environments with Simpana 9



Additional Simpana 9 Benefits

- ▶ Tightly integrated with leading storage array vendor technology maximizing high-performance backup and recovery capabilities
- ▶ Shifts data protection workloads away from production systems (cataloging, etc)
- ▶ Achieves complete lifecycle management, protection & retention of data across tiers of storage, tape & to cloud
- ▶ Automates many functions to minimize risk and ensure data is protected
 - Auto-discovery with auto-protection
- ▶ Single console visibility into resource consumption and utilization for better control and smarter decision making
- ▶ Reduces storage footprint for backup and archive copies



Modern Data Management

Simpana 9 for Virtual Environments

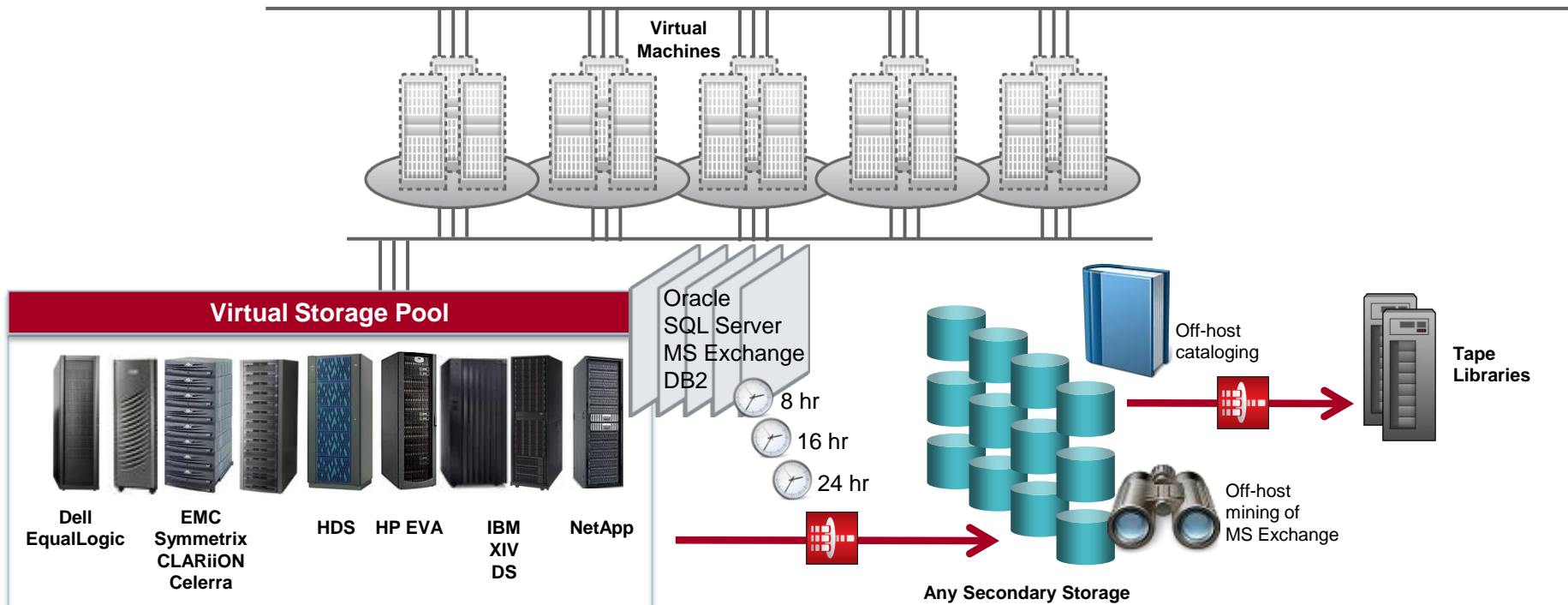


- ▶ Supports 1000's of VMs
- ▶ Hardware independence eliminates vendor lock in
- ▶ Near-instant application-consistent backup of 100's of VMs leveraging array-based snapshots to meet backup windows



- ▶ Multiple RPO's per day
- ▶ Manages data across tiers of storage and tape
- ▶ Off-host cataloging reduces impact on production servers
- ▶ Integrated deduplication reduces storage costs
- ▶ Off-host mining of MS Exchange

Data Center



Modern Data Management

VM Discovery & Recovery



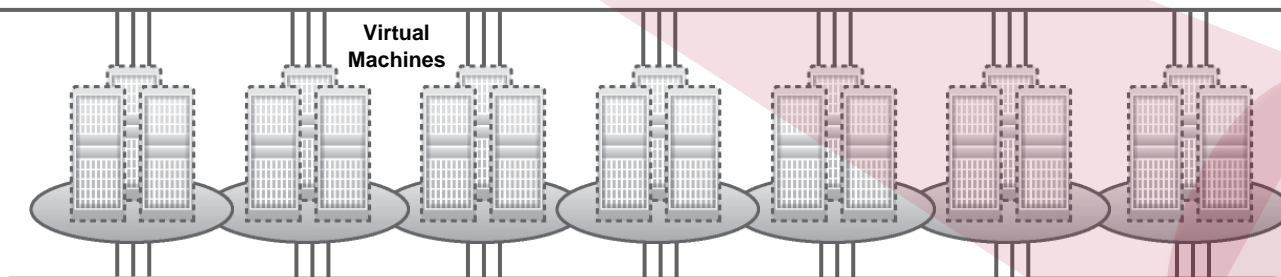
- ▶ Automatically discovers and protects new VMs using pre-defined rules
- ▶ Ensures new VMs are not left unprotected
- ▶ Centralized, integrated user interface to restore applications (not just full VMs) from secondary storage or tape back to primary storage system



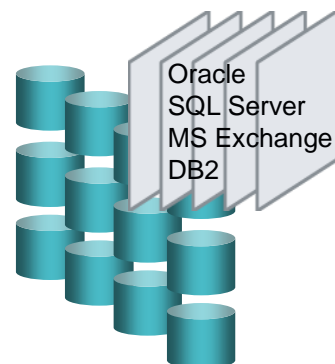
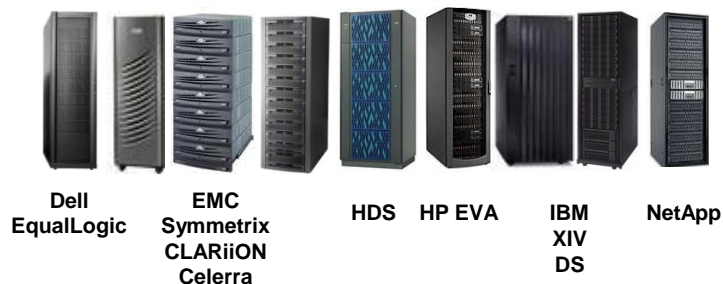
- ▶ Simplica knows where the data is at all times so it's as simple as Browse, Point & Click to recover
- ▶ Application is in a consistent state so recovery is simple (no database rebuilds, etc)

Data Center

Virtual Machines



Virtual Storage Pool



Any Secondary Storage



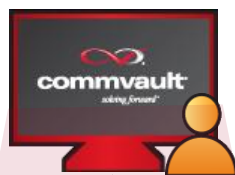
Tape Libraries

Modern Data Management

VM Reporting

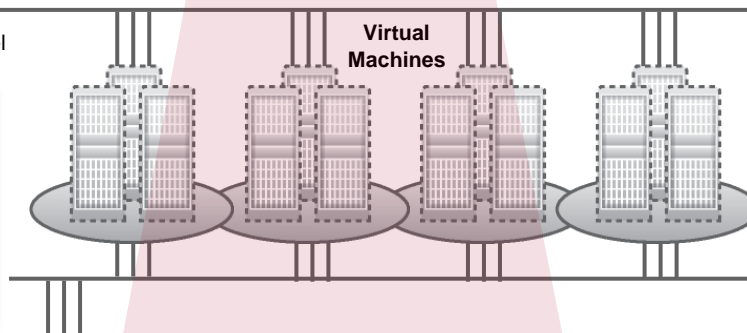


- ▶ Integrated SRM for reports describing the physical environment as well as the contents of individual VMs
- ▶ No impact. Leverages catalog created for data protection
- ▶ File-level analysis and trending for files inside VMs

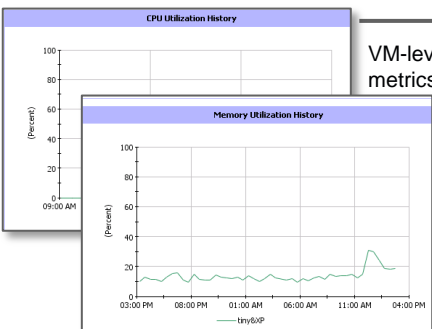


- ▶ Physical resource consumption reports for health-check of physical resources
- ▶ Combine information from physical reports and file-level analytics for better decision making such as ensuring critical VMs are hosted on the most appropriate servers

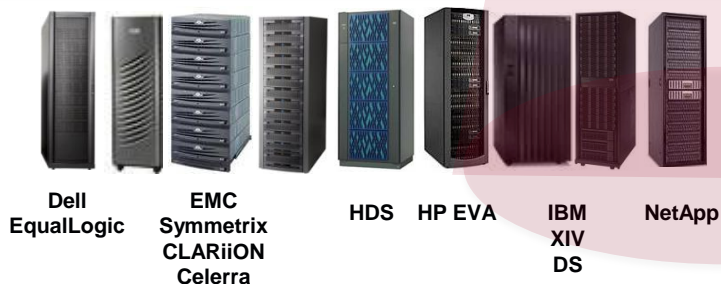
Data Center



VM-level metrics

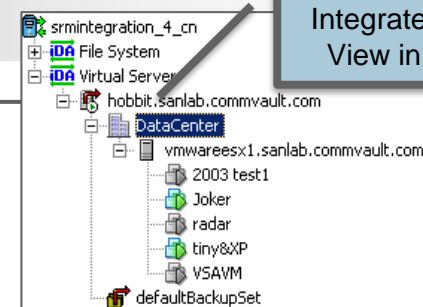


Virtual Storage Pool

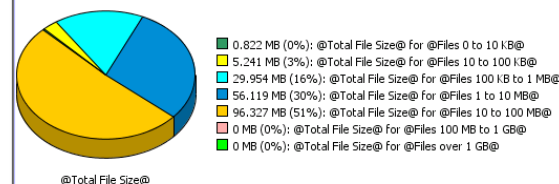


Any Secondary Storage

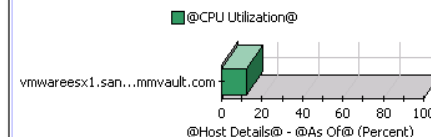
Integrated vCenter View in Console



@Space Usage Distribution@



CPU Utilization by Host



Data center metrics

Application Protection with SnapProtect™

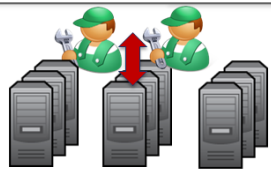


**IMPORTANT to Understand: The Capabilities Just Demonstrated are Unique
It's NOT Traditional Backup !!**

Which layer do you protect? What combination? Is it all integrated?

Application Layer

- Business Apps
- Application Failover
- Consistent Across DBs
- Logical Solution



Application Awareness

Database Layer

- Tables, Schemas, Transactions
- Database Failover
- Consistent Across Storage Arrays
- Logical and Physical Solution



Blend of Performance & Awareness

Storage Layer

- Bits, Bytes, Blocks
- Array LUN Failover
- Consistent within Storage Array
- Physical Solution



LUN Level Control

Traditional Approach

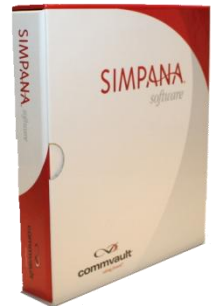
- Streaming Protection
- Native to Database/App/OS
- Silo Solutions – Not integrated

Storage Approach

- Fast
- Native tools to Array
- Silo Solutions – Not integrated

It's Not Either / Or with Simpana

- ▶ One solution spanning databases, operating systems and storage arrays
- ▶ Leverages the speed of storage array snapshots combined with the intelligence of the traditional approach
- ▶ Script free
- ▶ Automated and policy-driven
- ▶ Meets recovery and protection window requirements



SnapProtect™

Broad Array and Application Coverage



Vendor	Array	Snapshot
EMC	Clarion Arrays	SnapView Snap & Clone
EMC	Symmetrix Arrays	TimeFinder Mirror & Snap
EMC (limited to VMware)	Celerra (NFS)	SnapSure
NetApp	Ontap 7.x	Netapp Snap
Dell	Equallogic PS Series	Snapshot
Dell	Clarion Arrays	SnapView Snap & Clone
IBM	XIV Arrays	Snapshot
IBM	DS6000/DS8000 Arrays	Snapshot
IBM	DS3000/DS4000/DS5000 Arrays	Snapshot

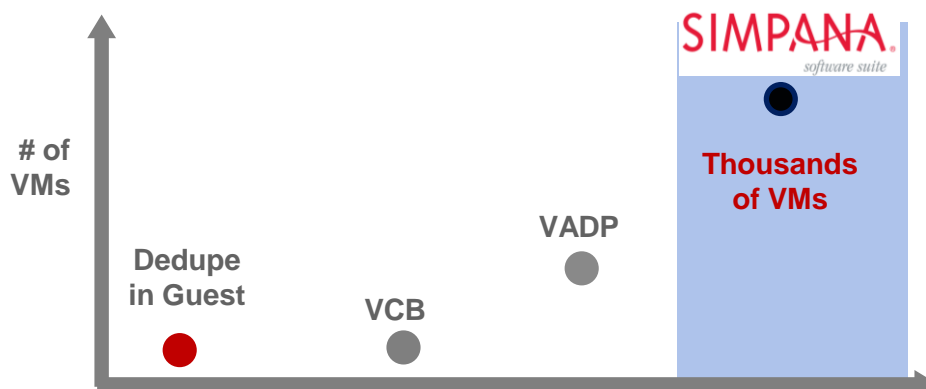
		Operating System	File System	Databases	Applications
IBM	N – Series Arrays	Windows 2003	NTFS	SQL 2005 & 2008 Exchange 2003 - 2010	
HDS	USP Arrays	Windows 2008 & R2	NTFS	SQL 2005 & 2008 Exchange 2003 - 2010	
HDS	AMS Arrays	VMware 4.x	NFS/FC/iSCSI data stores	-	VMware , NFS for EMC Celerra & NetApp
HP	EVA Arrays	Red Hat Linux 4.0	ext2, ext3, UFS, rieserfs, VxFS	Oracle 10g R2, 11g R1 & R2 DB2 V9 +	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
HP	StorageWorks XP Arrays	Red Hat Linux 5.0	ext2, ext3, UFS, rieserfs, VxFS	Oracle 10g R2, 11g R1 & R2 DB2 V9 +	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
Oracle	Sun Storage 6000 Array Family	SuSE Linux Enterprise Server 10.2	ext2, ext3, UFS, rieserfs, VxFS	Oracle 10g R2, 11g R1 & R2 DB2 V9 +	
Oracle	Sun Storage 9000 Family	AIX 5.2	JFS, JFS2, UFS	Oracle 10g R2, 11g R1 & R2	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
LSI (OEM'ed LSI products)	Variety of Arrays	AIX 5.3	JFS, JFS2, UFS	Oracle 10g R2, 11g R1 & R2	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
CommVault DDR	SOFTWARE	AIX 6.1	JFS, JFS2, UFS	Oracle 10g R2, 11g R1 & R2 DB2 V9 +	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
Open Enabler(SP2)	-	Solaris 10 SPARC	UFS, VxFS, ZFS	Oracle 10g R2, 11g R1 & R2 (Flying Zones)	SAP Brtools 7.0 & 7.1 on Oracle 10g R2, Oracle 11g R1 & R2
		HP-UX 11i v2 (PA-RISC & Itanium)	JFS, UFS, VxFS	Oracle 10g R2, 11g R1 & R2	SAP Brtools 7.0 & 7.1 on Oracle 10g R2
		HP-UX 11i v3 (PA-RISC & Itanium)	JFS, UFS, VxFS	Oracle 10g R2, 11g R1 & R2	SAP Brtools 7.0 & 7.1 on Oracle 10g R2

Simpana Software vs. Alternative Options

Easily handles:

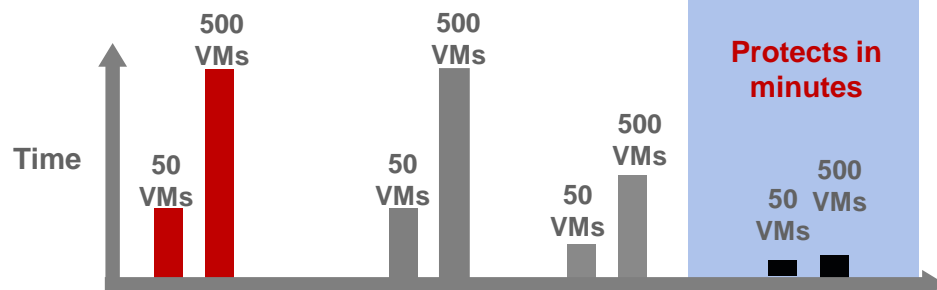
► Scale

- ✓ Immune to VM Sprawl
- ✓ No admin intervention



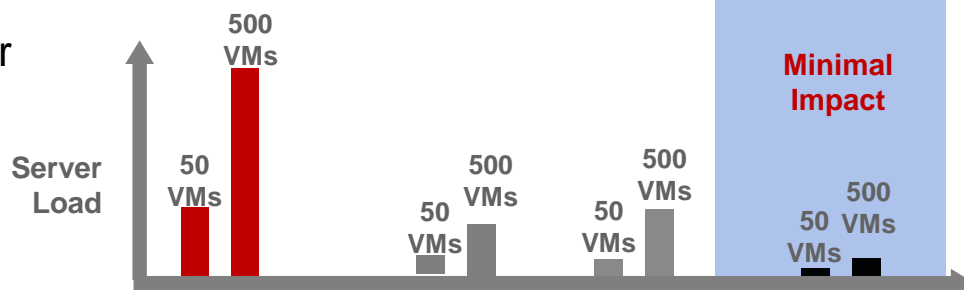
► Time to Protect

- ✓ Create protection copies in minute



► Infrastructure Impact

- ✓ Minimal physical and virtual server load
- ✓ Best utilization of expensive resources



Disk-based Data Protection Challenges

Deduplication Solves Some but Creates Many More



Data Growth vs.
Backup Windows

Rapid data growth stresses backup window - Protect rapidly growing data in a shorter period. Traditional method of shifting everything from front to back falls short.

Balance DR /
Recovery SLA against
Time & Cost

Fast restores and rapid DR are critical – Avoid tradeoff between fast restore/DR and cost. Hardware based replication is expensive. Tape copies are time consuming and resource intensive

Distributed Data
Location

Significant amount of data is generated remotely – Consolidate data over WAN in central location. Different recovery and retention needs per site while managing data centrally is challenging.

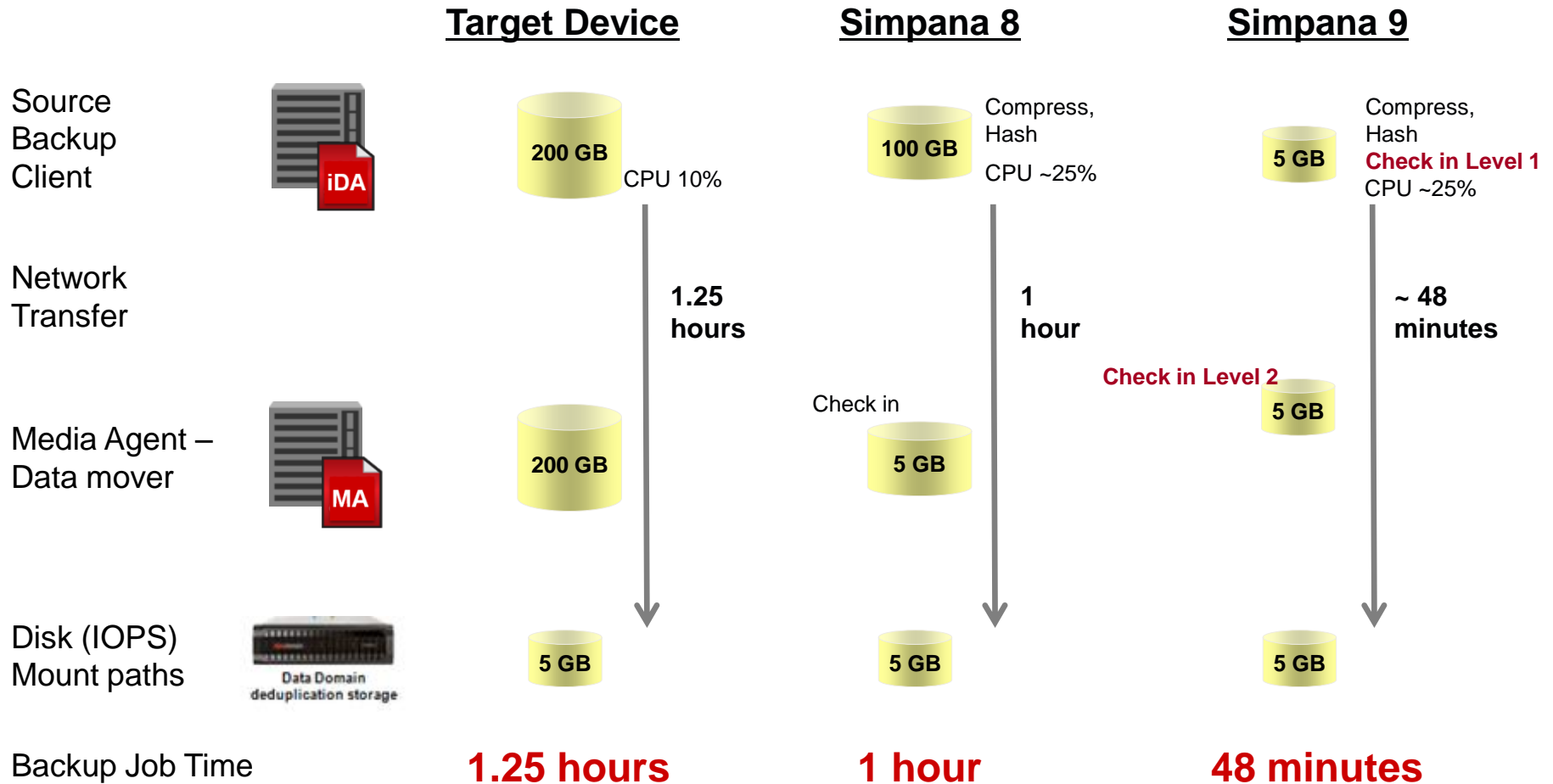
Cost to Scale

Economically scale solution to keep pace with growth - Once solution capacity is reached, can it be expanded without spending millions of dollars?



Working Smarter & Faster at the Source

Compressing the Window, Driving Faster Backups



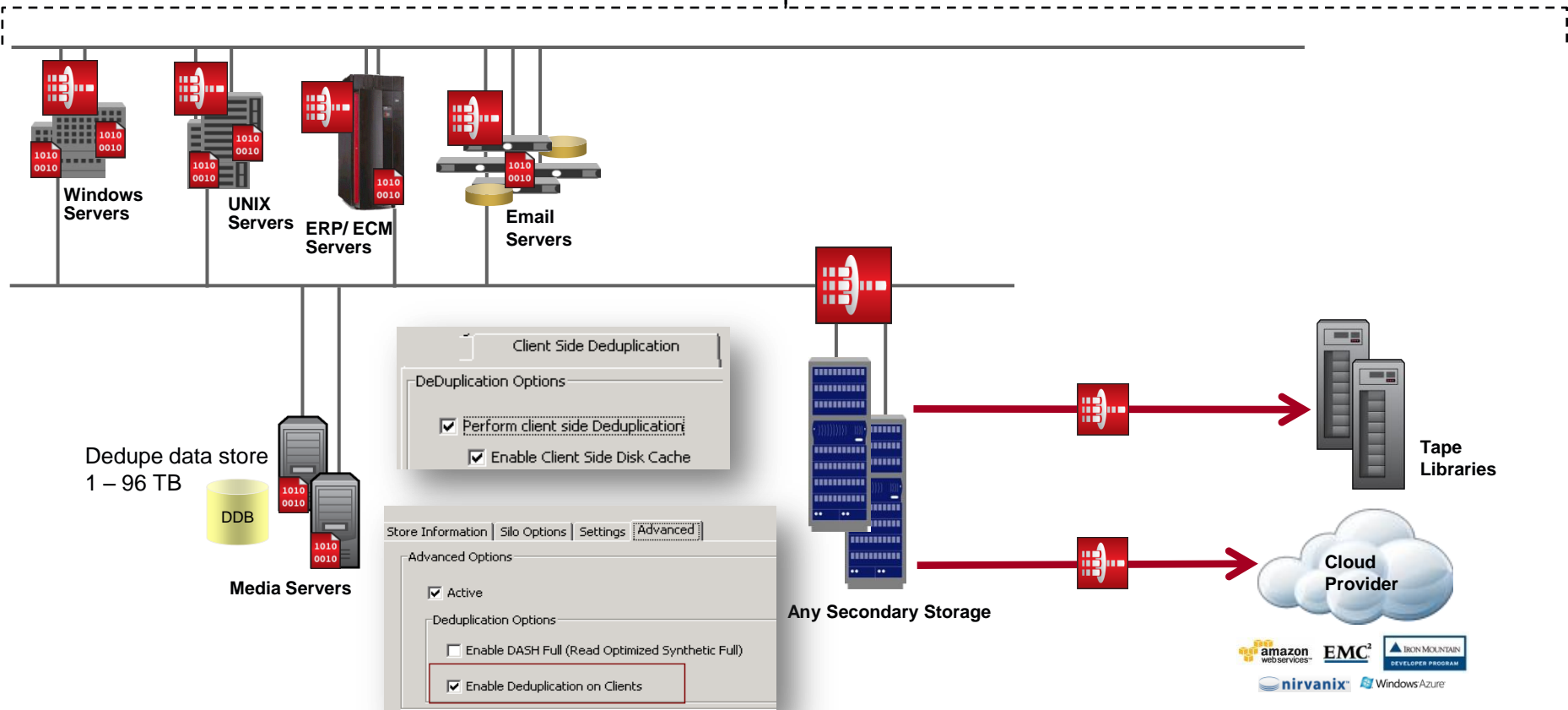
Finishes 50% faster using same infrastructure

Simpana 9 Deduplication

The Power of One Unified Product

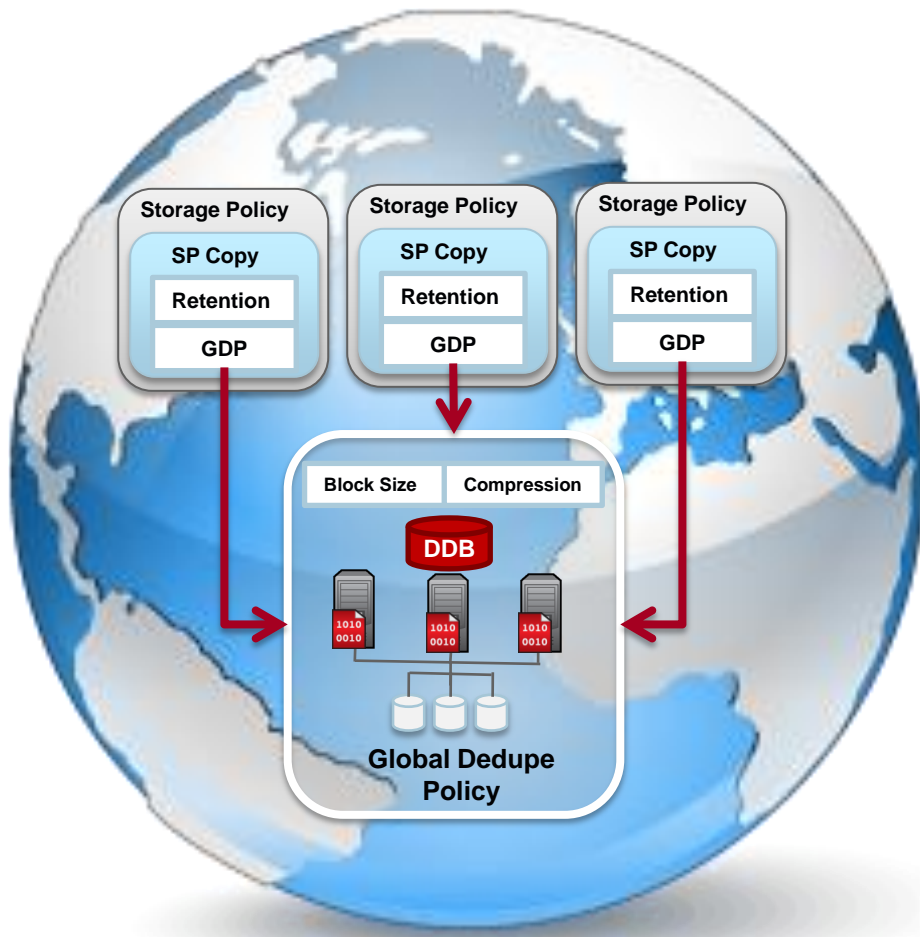


- ▶ One checkbox
- ▶ One architecture
- ▶ One set of shared resources
- ▶ One operational view
- ▶ One place to turn it on



Global Deduplication

- ▶ True global deduplication
 - Single deduplication database which supports multiple storage policies and source-side deduplication
- ▶ Each storage policy has its own retention settings while leveraging common dedupe database
- ▶ Can be applied at primary or secondary site. Use at secondary site enables multiple remote sites to consolidate data into as single global deduplication pool
- ▶ Enables customers to design their backup infrastructure and policies on business requirements, not deduplication requirements



Remote Office and Global Dedupe

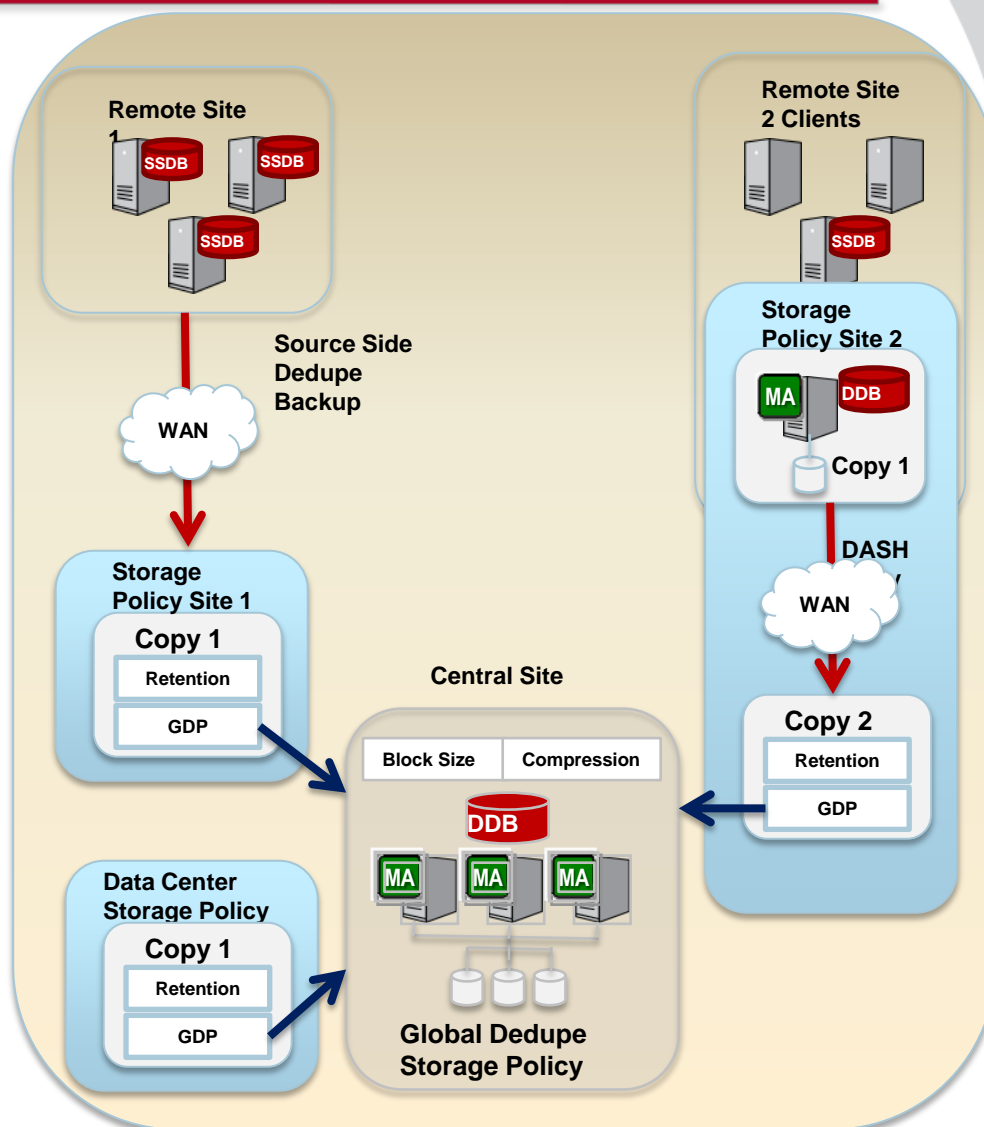
Remote Site 1 Requirement:

- ▶ Backup data to central site over WAN
- ▶ No local recovery copy needed
- ▶ Do not send data already sent by other remote sites

Remote Site 2 Requirement:

- ▶ Backup data locally for local recovery (2 weeks retention)
- ▶ Copy all/selective fulls to central site over WAN for longer retention
- ▶ Do not send data already sent by other remote sites

- ▶ Central dedupe database for each Sites Storage Policy
- ▶ Site 1 uses the GDP as destination for primary copy data
- ▶ Site 2 uses GDP as secondary copy, data backed up to local MA (primary copy) and DASH copied to central site
- ▶ GDP can be used as target for central Storage Policies as well
- ▶ Truly Global Deduplication Store providing total flexibility and control on data retention compliance with minimal network impact and maximum data reduction





Data Protection Modernization

- ▶ One application managed centrally
- ▶ Near-instant application backup leveraging array-based snapshots
- ▶ Manage data through its lifecycle across tiers of storage & tape



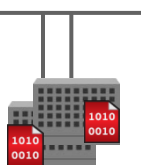
- ▶ Meet SLAs with centralized rapid recovery, independent of location. Browse, point, click.
- ▶ Integrated deduplication reduces storage costs
- ▶ Industry-leading features for virtual environments
- ▶ Cloud integration built in for flexibility

Remote Site



UNIX Servers

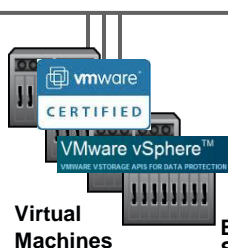
Primary Site



Windows Servers



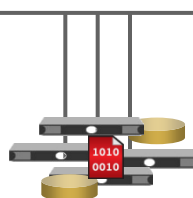
UNIX Servers



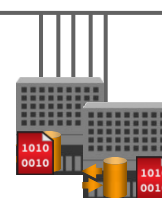
Virtual Machines



ERP/ECM Servers



Email Servers

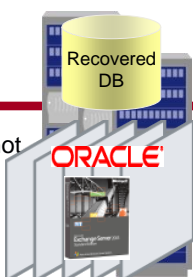


Servers with Storage (UNIX / Windows)

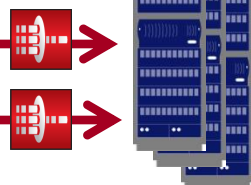


Primary Storage

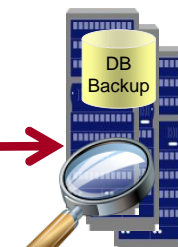
Snapshot backup copies



Primary Storage



Any Secondary Storage



Any Secondary Storage



Tape Libraries



Cloud Provider

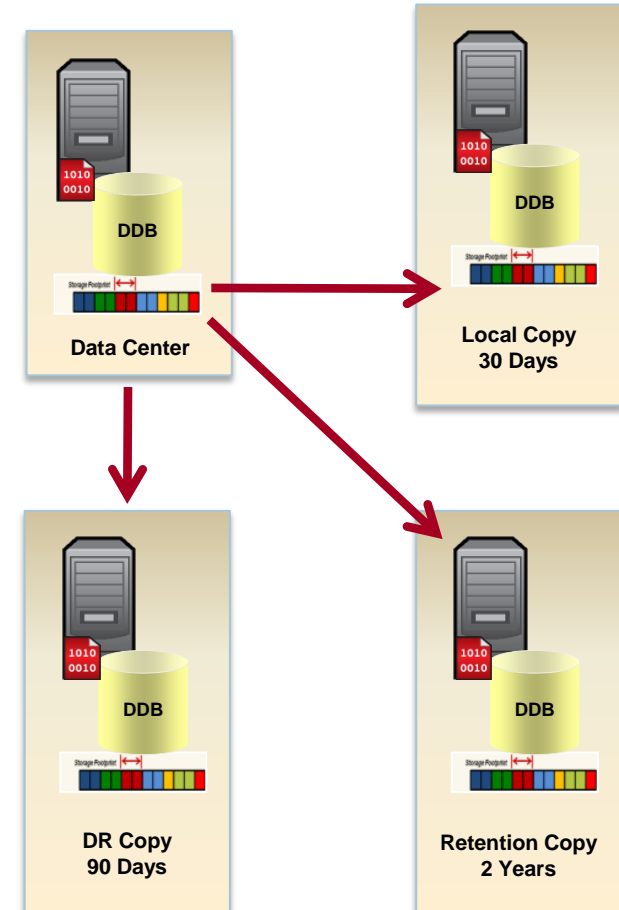


Backup Copies in a DASH

DASH = Dedupe Accelerated Streaming Hash



- ▶ **Dedupe aware** – only moves changed blocks / segments (no processing, just compare and transfer). Reduces bandwidth.
- ▶ **Independent retention** – Control how long data remains on each copy per recovery and retention needs.
- ▶ **Platform independent** – use any source or destination storage device. Allows greater flexibility and options/
- ▶ **Multiple hops / Cascaded copies** - Use multiple secondary copies where you copying simultaneously or independently, each with its own retention. Store local copy for recovery, another copy for DR and a third for long term retention.
- ▶ **Centrally managed and simple to configure**
- ▶ **Schedulable, full reporting, verification, resilient, restartable, etc.**

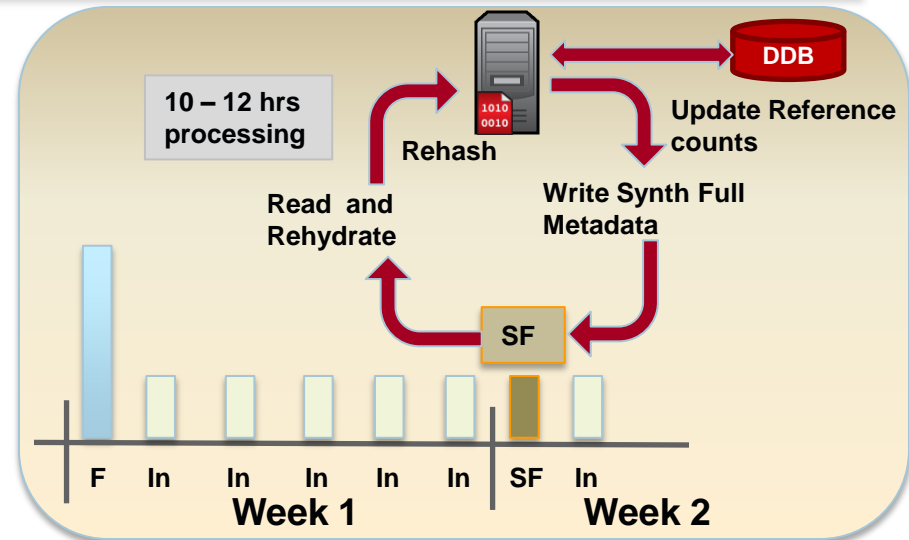


Synthetic Full Backups in a DASH



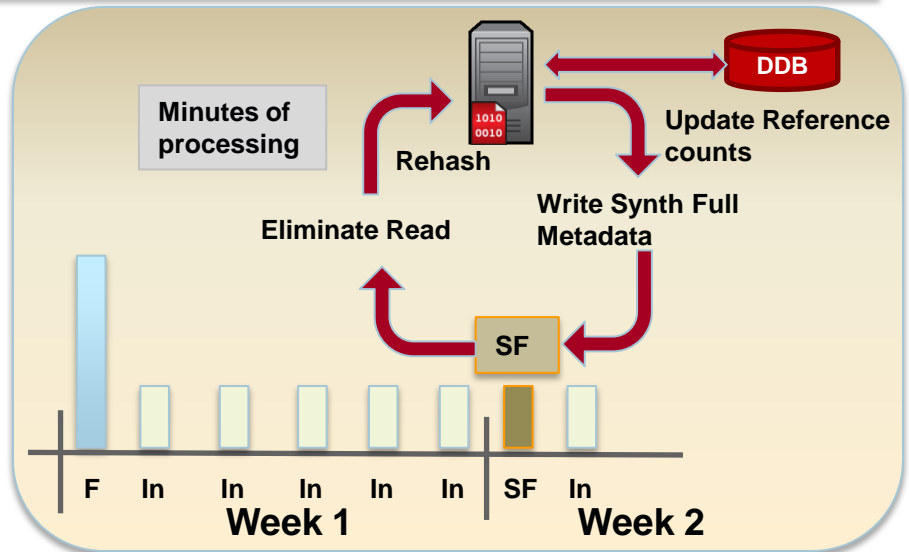
Standard Synthetic Full – Read, rehydrate and re-deduplicate

- Time consuming and resource intensive
- Minimal net new data written to disk
- Synthetic full 50% slower than regular fulls



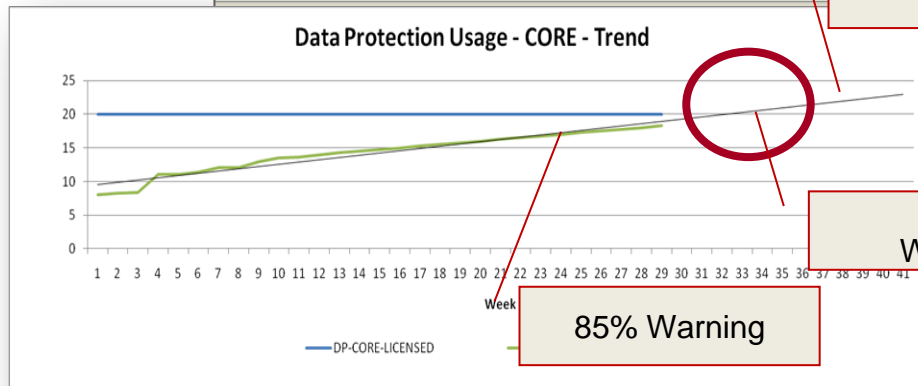
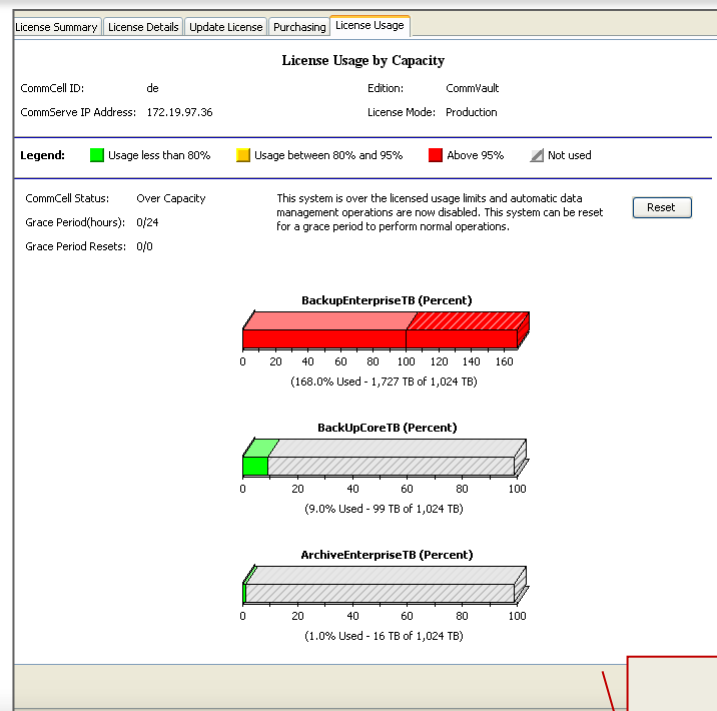
Introducing DASH Full

- Minimizes the read on disk. Completely eliminates rehydration and re-dedupe.
- Update reference counts and writes only metadata is written to disk.
- **Synthetic Full operation reduced from several hours to few minutes**



Simplified Licensing

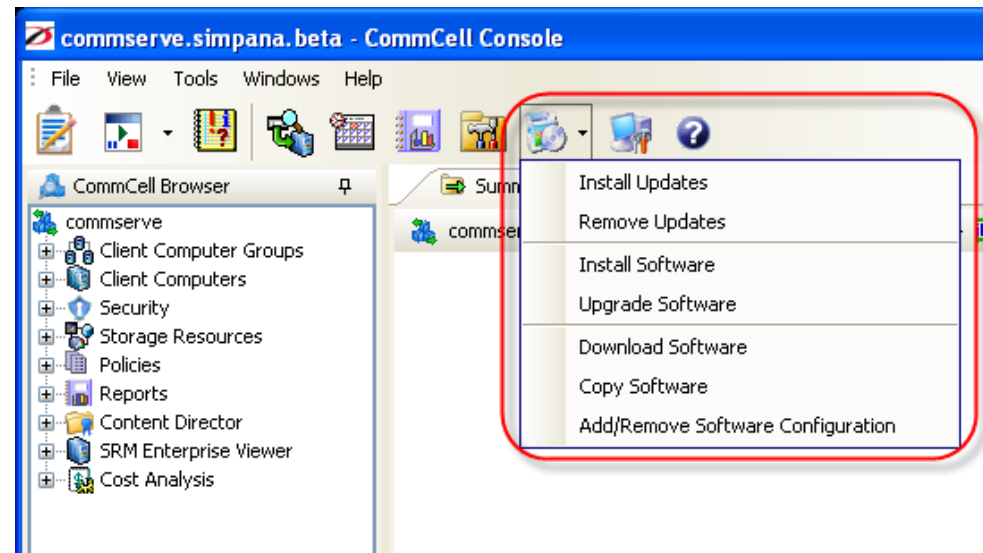
- ▶ Capacity encoded into license key
- ▶ Dashboard to measure where you stand
 - Warnings at 85%, 100%, > 100% stop)
- ▶ Ability to “reset” an overage (as you get more capacity licensed)
- ▶ Automatically reassesses usage daily
- ▶ Trending analysis for better planning
- ▶ Eliminates complex manual auditing



Auto-Discovery and Installation

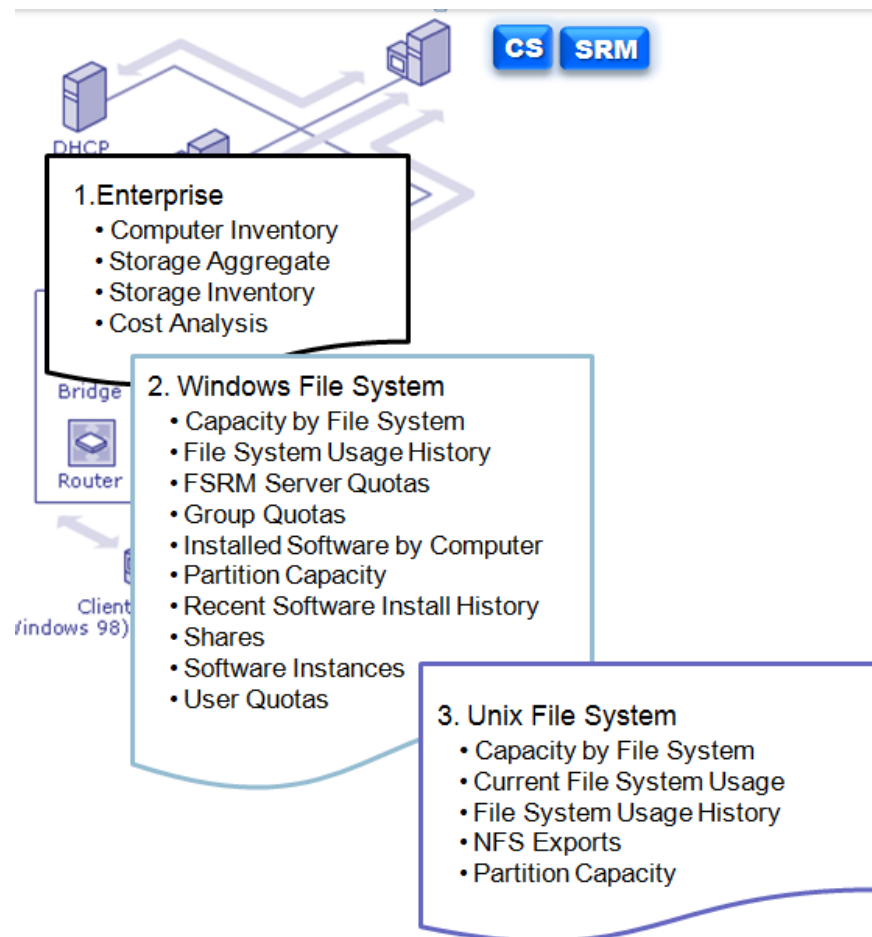
Console Driven, Policy-based

- ▶ Identify the domain to scan
- ▶ Reports on discovered servers
- ▶ Automatically pushes software to all identified systems within the domain (or you can do it selectively)



Agentless, Remote SRM

- ▶ Provides high-level view of systems and file systems
- ▶ Runs from a central console
- ▶ Lightweight collection leveraging native OS tools
 - WMI for Windows
 - SSH for Linux/Unix

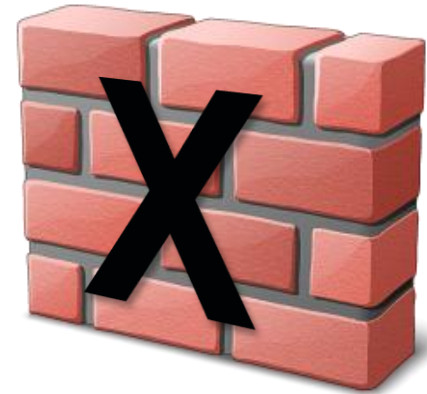


Eliminating Barriers with Fast Pass Migration

Simplified Migration to Modern Data Management with CommVault

► Symantec & IBM customers face many challenges

- High maintenance costs
- Bad customer support
- Very difficult upgrades
- Buggy software
- Limited reporting
- Non-consistent sales support
- ...



Take a “Fast Pass” to simplified migration with CommVault

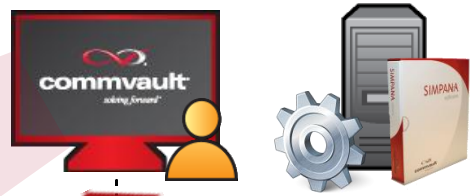


Modernization for NetBackup & TSM Customers

Simplified Migration to Simpana®



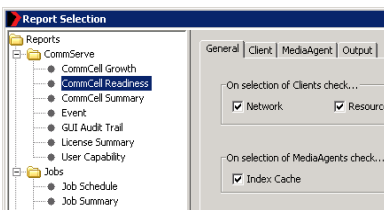
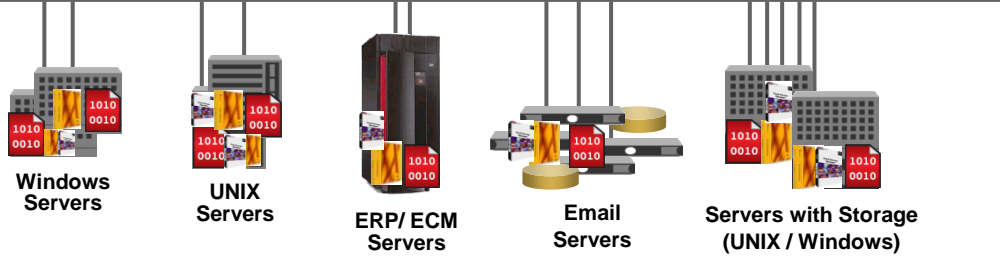
- ▶ **DISCOVER:** Pull client information, policies & job details from NBU Master Server
- ▶ **REPORT:** Falls naturally into Simpana job reporting / monitoring



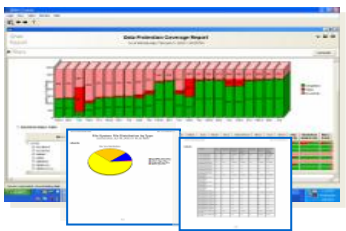
- ▶ **CONVERT:** Silent, automated installation of CommVault agents.
- ▶ Hit "Go" and clients are converted to Simpana data protection utilizing pre-existing policies & job details.



NetBackup or TSM Master Server



Job Reporting



Performance Monitoring

Client Name	Client Type	Client Status	Client Policy	Client Job	Client Date
Client 1	Windows	Online	Policy 1	Job 1	2010-01-01
Client 2	UNIX	Offline	Policy 2	Job 2	2010-01-02
Client 3	Windows	Online	Policy 3	Job 3	2010-01-03
Client 4	UNIX	Online	Policy 4	Job 4	2010-01-04
Client 5	Windows	Offline	Policy 5	Job 5	2010-01-05

Clients, Jobs, History



New Migration Operations Services Suite

Eases the Transition to CommVault® Simpana®



- ▶ Faster software deployment for SMB and Enterprise Customers
- ▶ Proactive risk identification cuts time to migration
- ▶ Full-breadth of Services delivered throughout the migration lifecycle

Analysis and Implementation Automation

- Identifies protected legacy clients & level of protection
- Captures policy and name differences for client servers current backup schemas
- Automates client deployment and schedule creation with captured information

Operations and Audit Management

- Quickly access single-source reporting for CommVault and legacy backup information
- Allow fast data discovery for legal and audit inquiries, with less operational burden.
- Compare CommCell® health and performance to legacy application set (ROMS® Service)

Process Best Practices

- Optimize new CommCell operation and performance; identify issues with ROMS
- Replace old habits and procedures with CommVault Best Practices
- Leverage integrated views of new/old data protection performance for smooth transition





CommVault Remote Operations Management Service

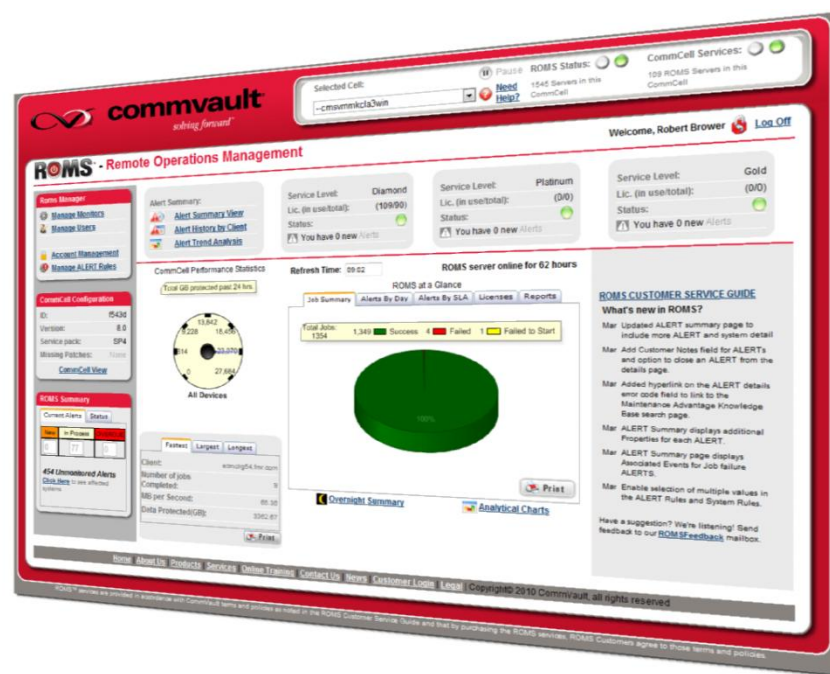
- ▶ CommVault's leading Remote Monitoring Software as Service included in Simpana 9
- ▶ Every v9 CommCell includes a 30 day access package to the ROMS Monitoring Service and website

The Industry's Most Advanced Support Service

- Fully integrated on Service activation with CommVault Customer Support
- CommServe integration with central monitoring system; components are tracked against SLAs for protection service
- Powerful rules engine allows for workflow automation action on alerts, notifications, support escalations...
- Log capture and automation capabilities minimize operational requirements for Support
- No agents to install, full CommCell oversight from a single UI

Key Benefits

- Real Time Support integration
- Access anywhere dashboard
- Minimize internal operations expense
- Minimize Time to Resolution





Summary

Simpana 9 delivers significant enhancements to **improve operational efficiency, agility and reduce storage costs.**

- ▶ Scalable, revolutionary Gen 3 Virtual Server data protection
- ▶ Global data reduction with Gen 3 Deduplication
- ▶ Modern Data Protection for near instant backups, advanced replication and rapid recovery
- ▶ Next-generation licensing & migration for simplified data management



Solves Physical, Virtual, and All that Lies Between

You are cordially invited!
BSMOLENYAK@commvault.com



Solve Physical, Virtual, and All That Lies Between

If you're not yet among the 12,000+ companies that have discovered a better solution to modern data and information management challenges with CommVault® Simpana® software, you'll want to mark your calendar for October 5th. We invite you to join us for an eye-opening virtual event and webcast to learn about Simpana 9 data and information management software. This groundbreaking software is the bridge between where you are and where you need to be in the rapidly transforming IT landscape. Learn all about the amazing features and capabilities that will help you solve physical, virtual, and all that lies between, including:

- Converting legacy configurations quickly and confidently with new migration tools and reporting capabilities.
- Slashing backup windows in half and rapidly restoring in minutes for ultimate data protection with Simpana backup and recovery, snapshot technology and deduplication.
- Protecting hundreds of virtual machines in minutes and scaling to thousands without sacrificing access.
- Keeping data growth in check with fully integrated source- and target- side deduplication.

[Click here to register for the virtual event and webcast on October 5.](#)

To learn more about everything Simpana software can solve for you, visit commvault.com.

Date:
Tuesday, October 5, 2010

Through
Monday January 3, 2011

Time:
Anytime

Duration:
1 Hour

**Register for the
LIVE Webcast [here!](#)**