

HERE TO
HELP

BUILDING BLOCKS TO THE PERFECT HYBRID CLOUD: HPE SIMPLIVITY AND COMMVAULT

Vasco Wong

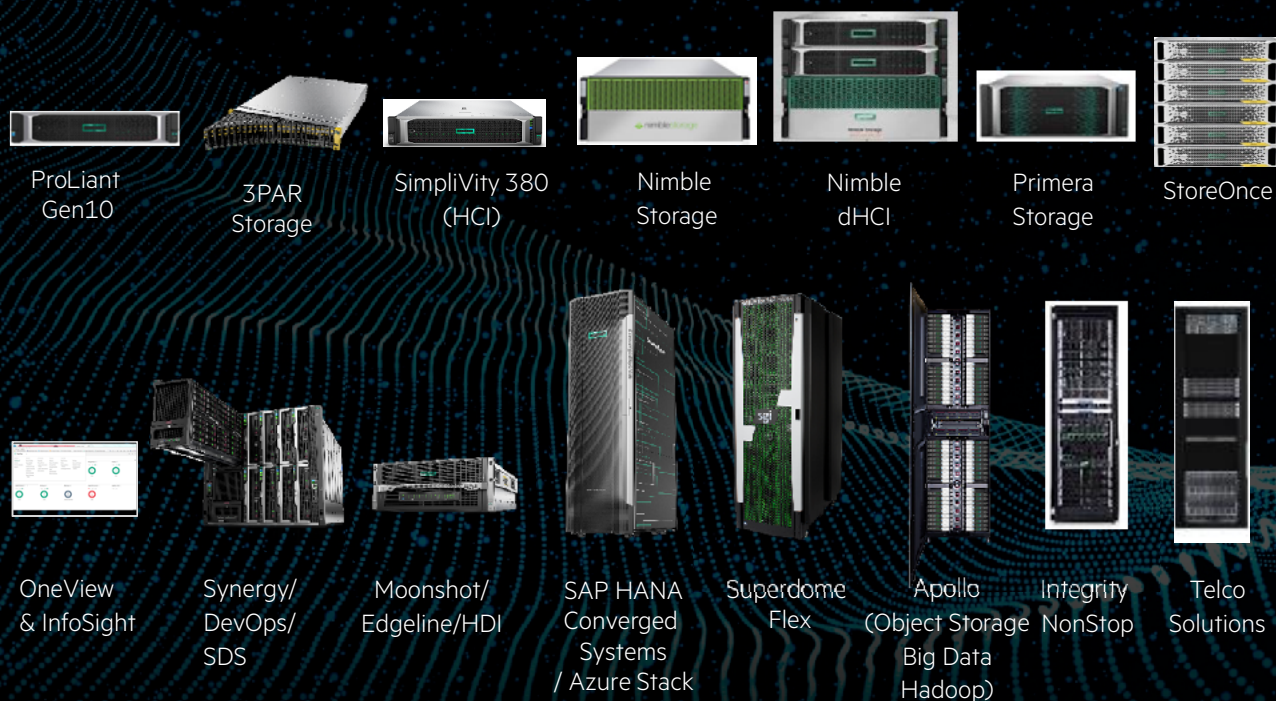
Hyperconverged Solution Architect, HPE

COMMVAULT 

 SYNnex

HPE PORTFOLIO - DELIVER THE RIGHT SOLUTION FOR CUSTOMER CHALLENGE

Key offerings



Key partnerships



HPE SIMPLIVITY

Intelligent HCI for general purpose workloads, edge, and ROBO



INTELLIGENTLY
SIMPLE

HYPER
EFFICIENT

EDGE
OPTIMIZED

CLOUD CONNECTED

WHAT IS HPE SIMPLIVITY 380

- HPE SimpliVity 380 is an all-flash, software-defined HCI solution built on HPE ProLiant DL380

HPE SimpliVity combines IT infrastructure and advanced data services via the HPE SimpliVity Data Virtualization Platform, which includes:

- HPE OmniStack virtual controller
 - Built-in resilience, backup, and disaster recovery
 - Enables a single shared resource pool across multiple sites
 - Global VM-centric management and mobility
- HPE OmniStack accelerator card
 - Allows on-the-fly inline compression and deduplication with no performance loss
 - Increases performance and efficiency by eliminating extraneous I/O activity
 - 90% capacity savings across primary storage and backup
- Ideal to create an on-premises or Hybrid Cloud solution



50%

savings in end-to-end network configuration and troubleshooting

90%

capacity savings across primary storage and backup

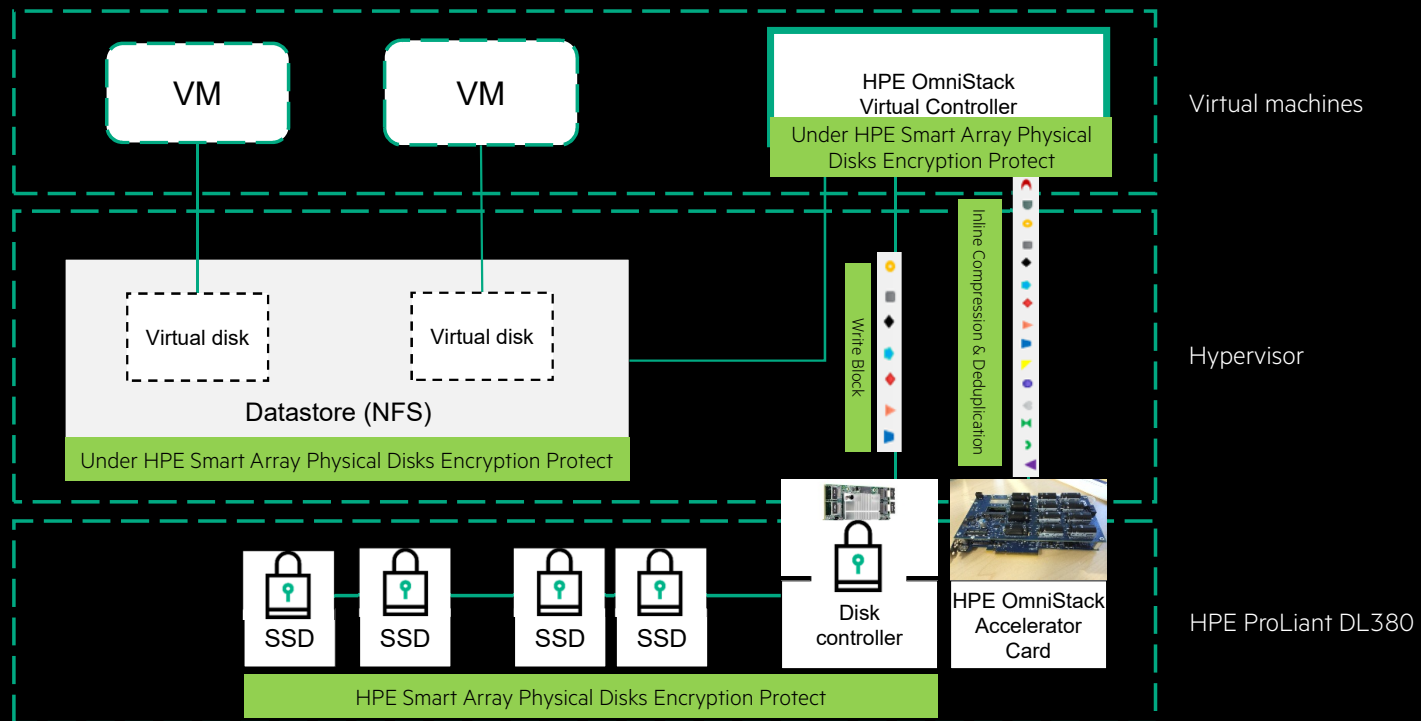
91%

time freed to focus on apps

Source: [Power to the VM administrator](#)

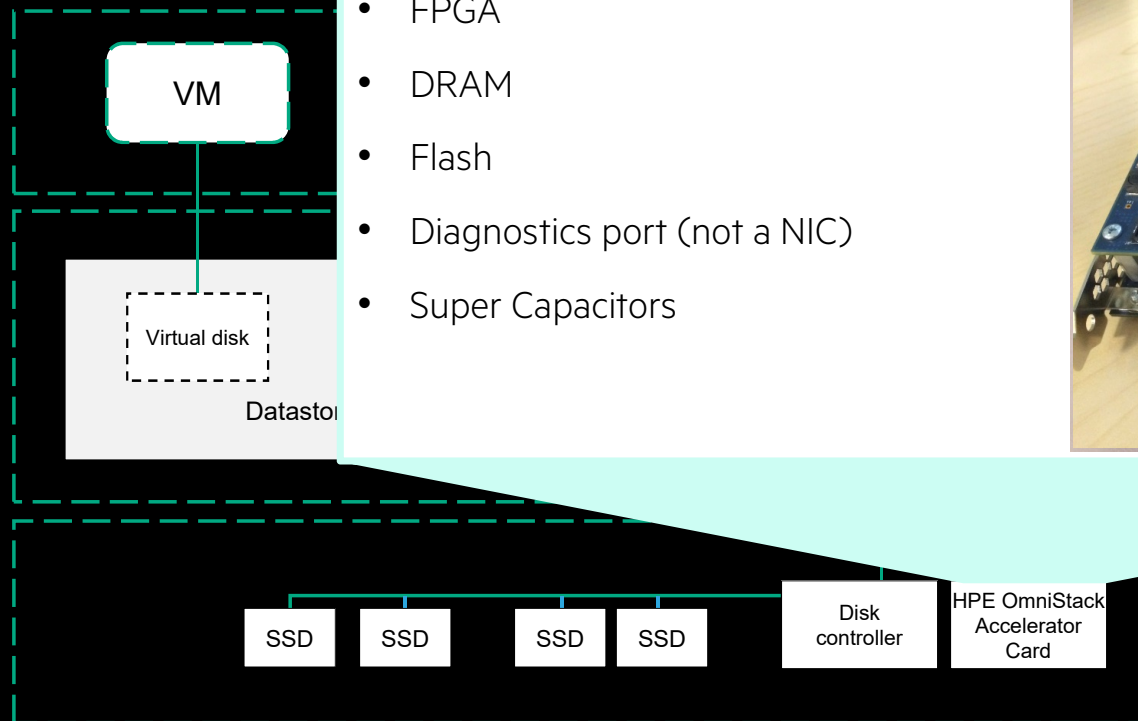
COMPONENTS OF HPE SIMPLIVITY 380 GEN 10

- Cluster
- Data Virtualization Platform
- HPE ProLiant DL380 with Smart Array Controller
- HPE OmniStack Virtual Controller
- HPE OmniStack Accelerator Card
- HPE SimpliVity hyperconverged node



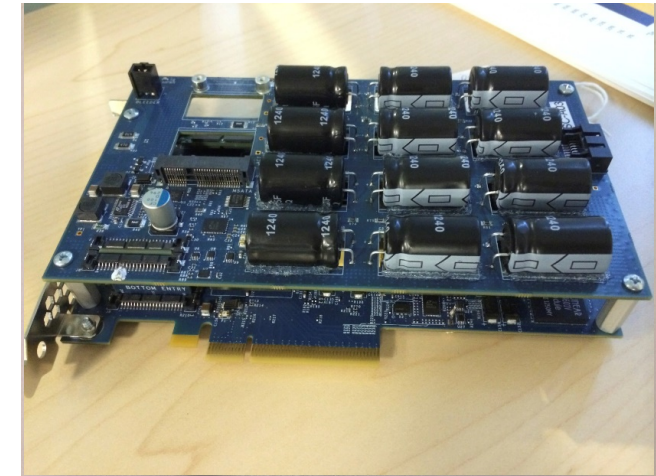
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Full height, full length, double-width PCIe card

- FPGA
- DRAM
- Flash
- Diagnostics port (not a NIC)
- Super Capacitors



REDUCED COMPLEXITY WITH SEAMLESS MANAGEMENT



2-node high availability

Zero administration

Rapid multi-site failover

CLOUD EXPERIENCE WITH SIMPLE, POWERFUL BUSINESS CONTINUITY

Backup Locally and Globally

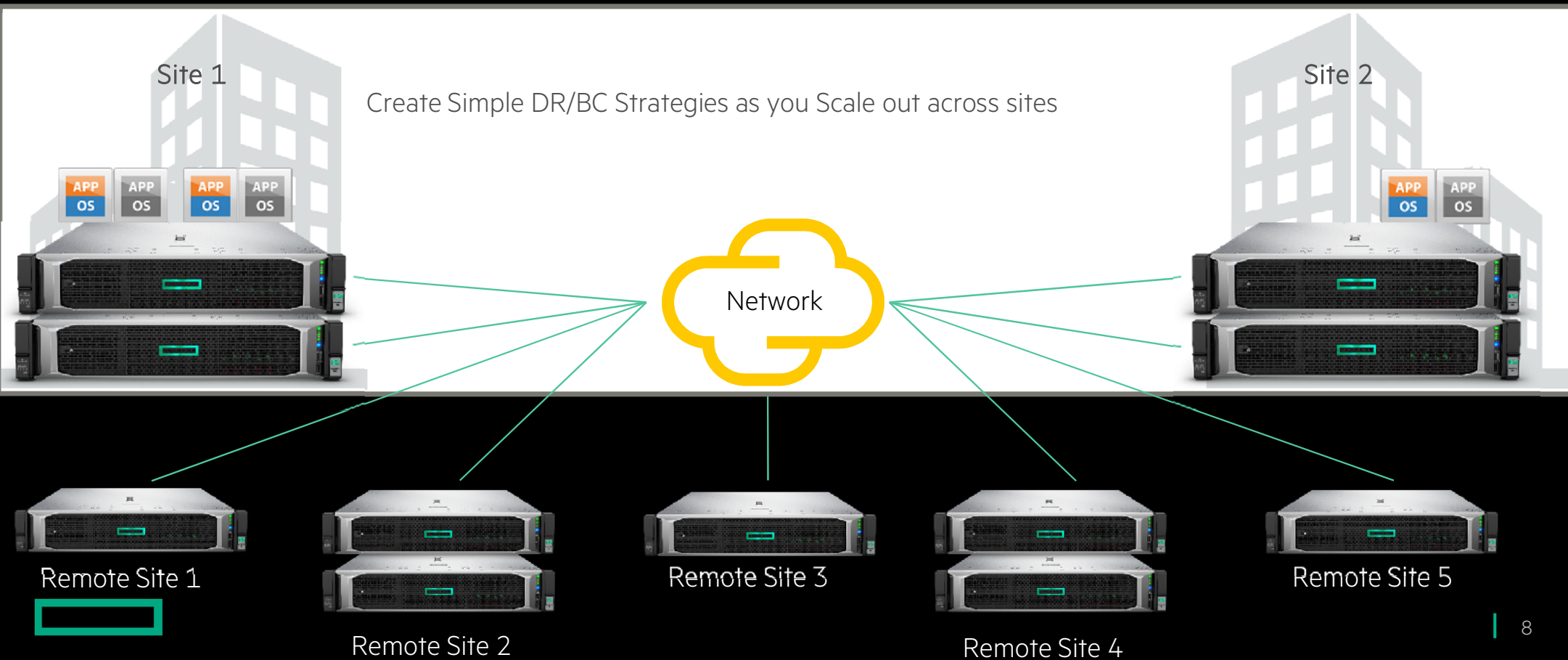
“Best in Class” Replication included

Automate VM Moves Across Sites

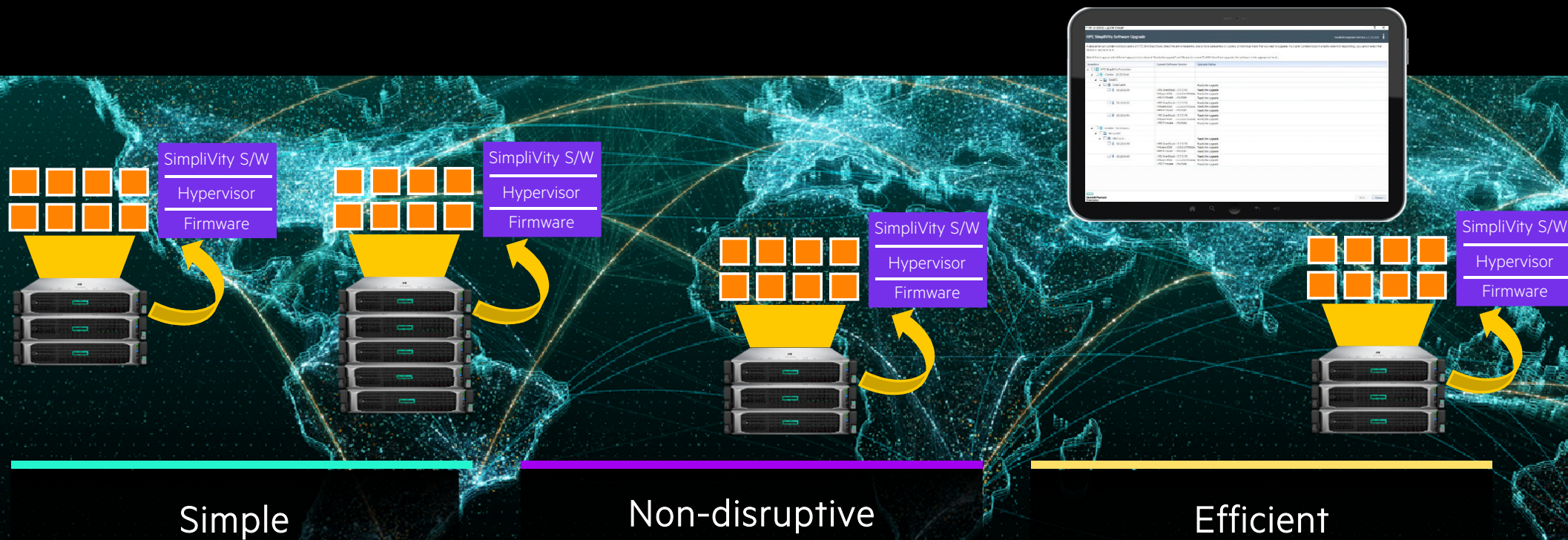
Global Unified Management with intelligence

Enable Data Mobility across all sites

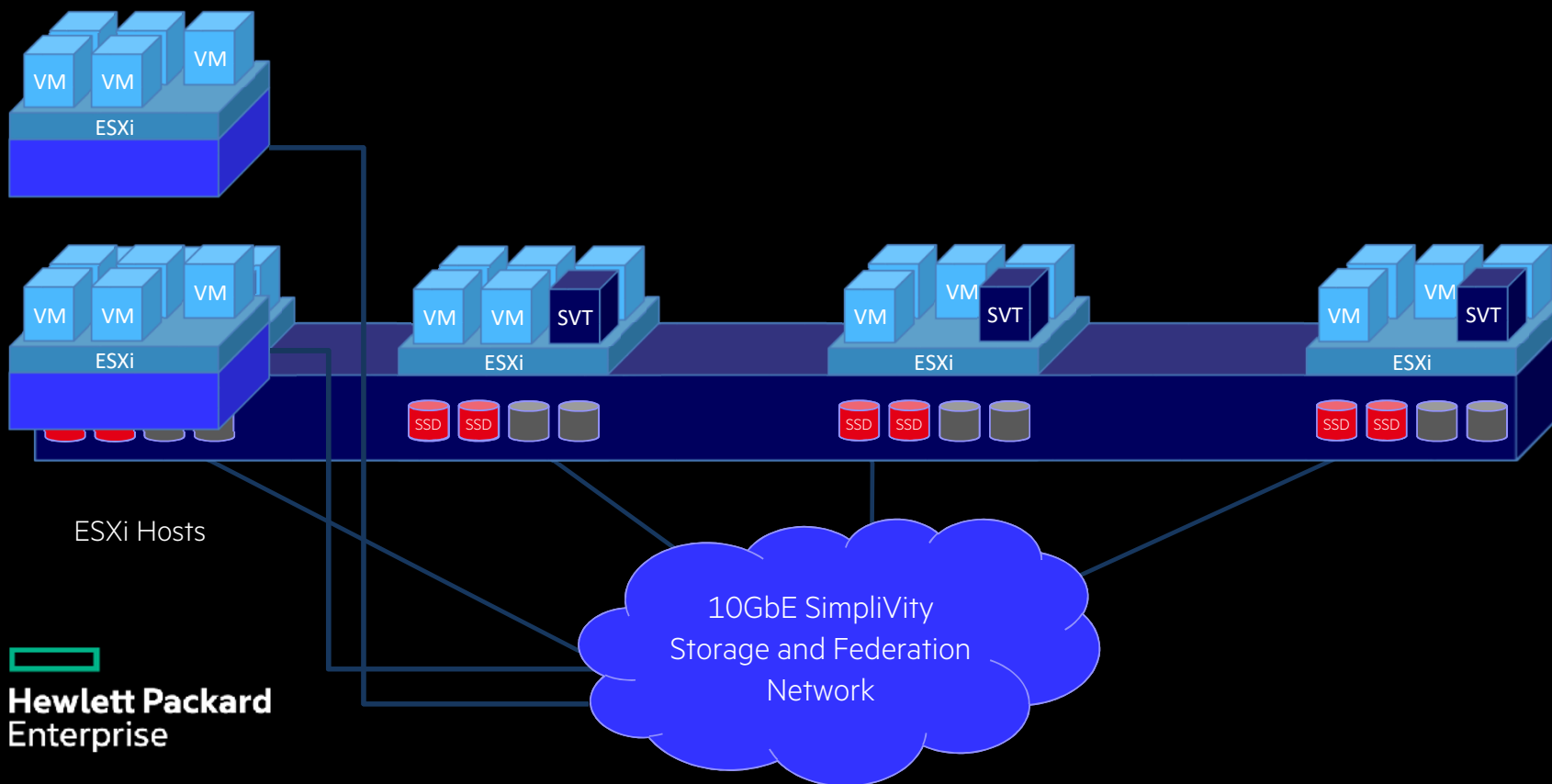
Establish Hub & Spoke design



ONE-CLICK CLUSTER UPGRADE: SIMPLIFYING THE EXPERIENCE

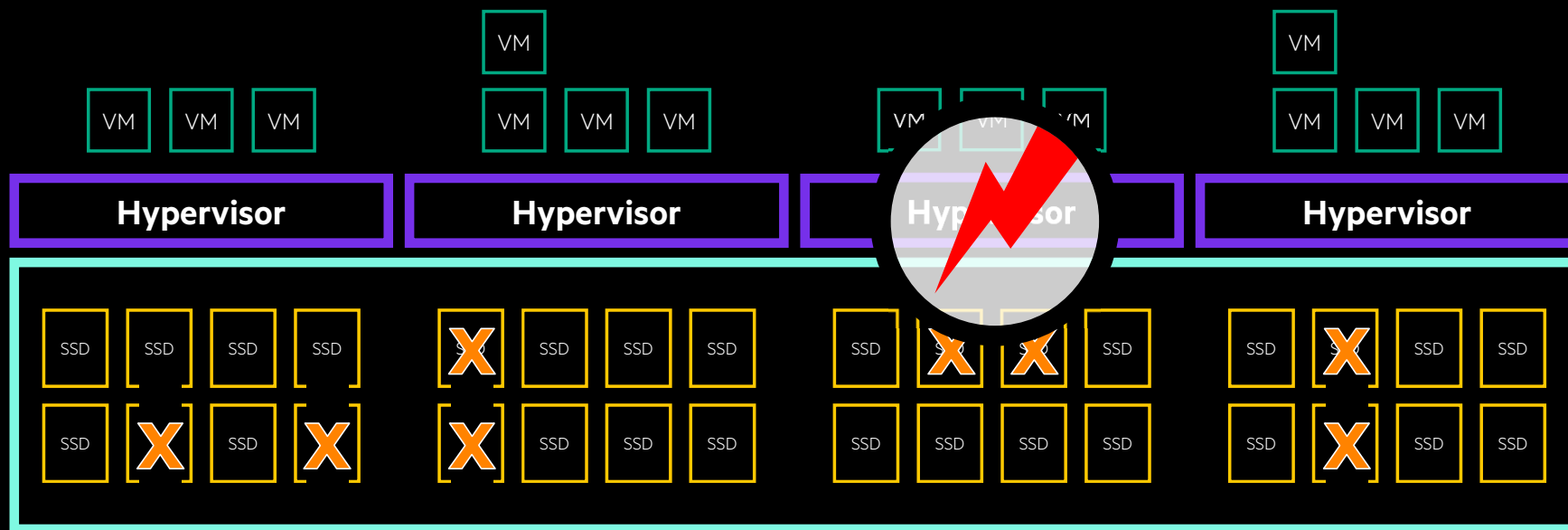


PROTECT YOUR INVESTMENT BY CONNECTING TO EXISTING ENVIRONMENT



PROTECTING YOUR DATA

RAIN + RAID vs. RAIN



Data Protection with RAIN + RAID (SimpliVity)

BACKUP AND RESTORE WITH JUST A FEW CLICKS

Fully restore a VM of 1TB in 60 seconds

The screenshot shows the 'Search Backups' window for a 'Windows Server 2012 Demo' virtual machine. A 'BACKUP ACTIONS' menu is open, with 'Restore Virtual Machine' selected. The main area displays a table of backup records.

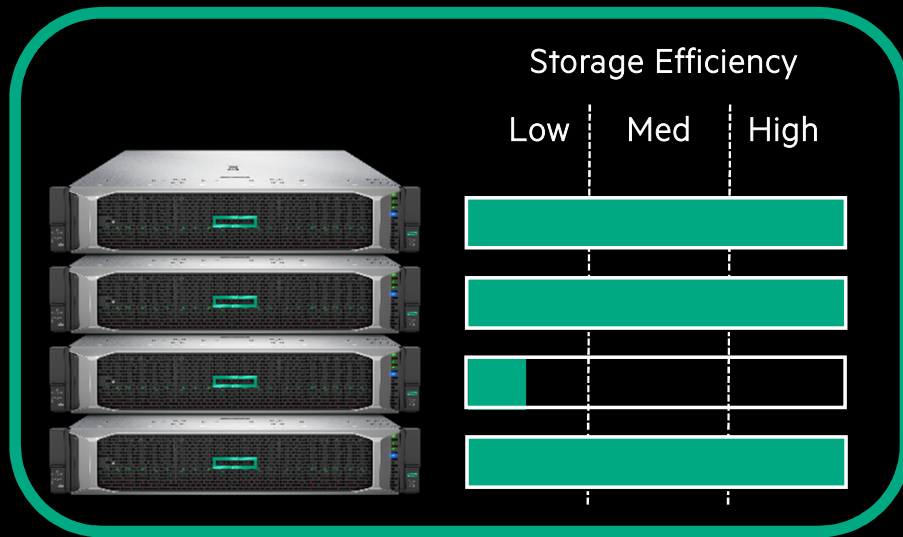
	Timestamp	Status	Size	Unique Backup Size	Unique Size Calculation Time	Sent Size	Sent Duration	Sent Completion	Type	Application Consistent	Exp
<input checked="" type="checkbox"/>	7/19/20, 12:00 PM	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/18 12:00 PM
<input type="checkbox"/>	7/18/20, 12:00 PM	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/17 12:00 PM
<input type="checkbox"/>	7/17/20, 12:00 PM	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/16 12:00 PM
<input type="checkbox"/>	7/16/20, 12:00 PM	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/15 12:00 PM
<input type="checkbox"/>	2020-07-15T00:00:00-04:00	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/14 12:00 PM
<input type="checkbox"/>	2020-07-14T00:00:01-04:00	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/13 12:00 PM
<input type="checkbox"/>	2020-07-13T00:00:00-04:00	Protected	63.7 GB	0.0 KB		0.0 KB			Policy	No	8/12 12:00 PM

At the bottom of the window, there are 'CLOSE' and 'HELP' buttons, and a footer for 'Hewlett Packard Enterprise'.

HPE SIMPLIVITY RESOURCE BALANCER

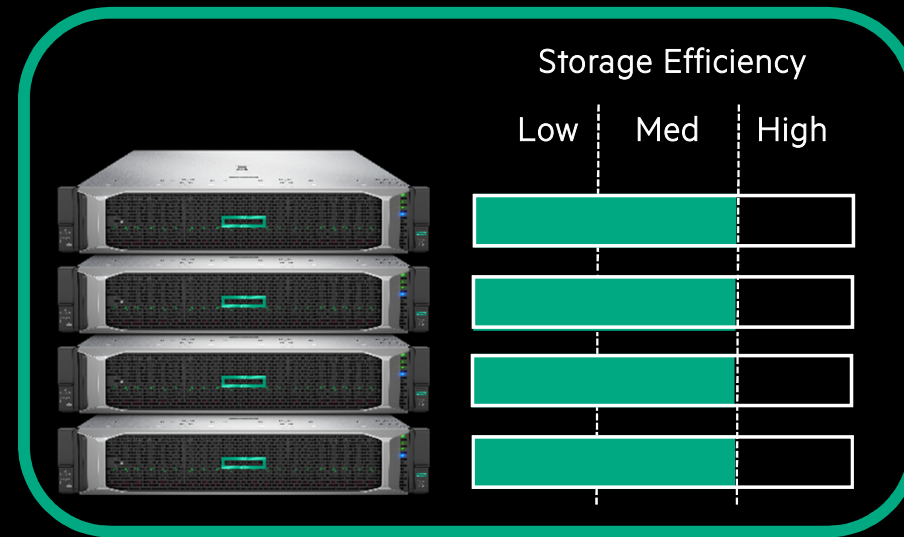
Suboptimal Capacity Utilization

HPE SimpliVity Cluster 1



Resource Balancer changes VM location maximize storage efficiency

HPE SimpliVity Cluster 1



HPE SIMPLIVITY RESOURCE BALANCER

Write IO Load Imbalance

HPE SimpliVity Cluster 1



Automatic Resource Balancer changes VM location to adjust IO

HPE SimpliVity Cluster 1

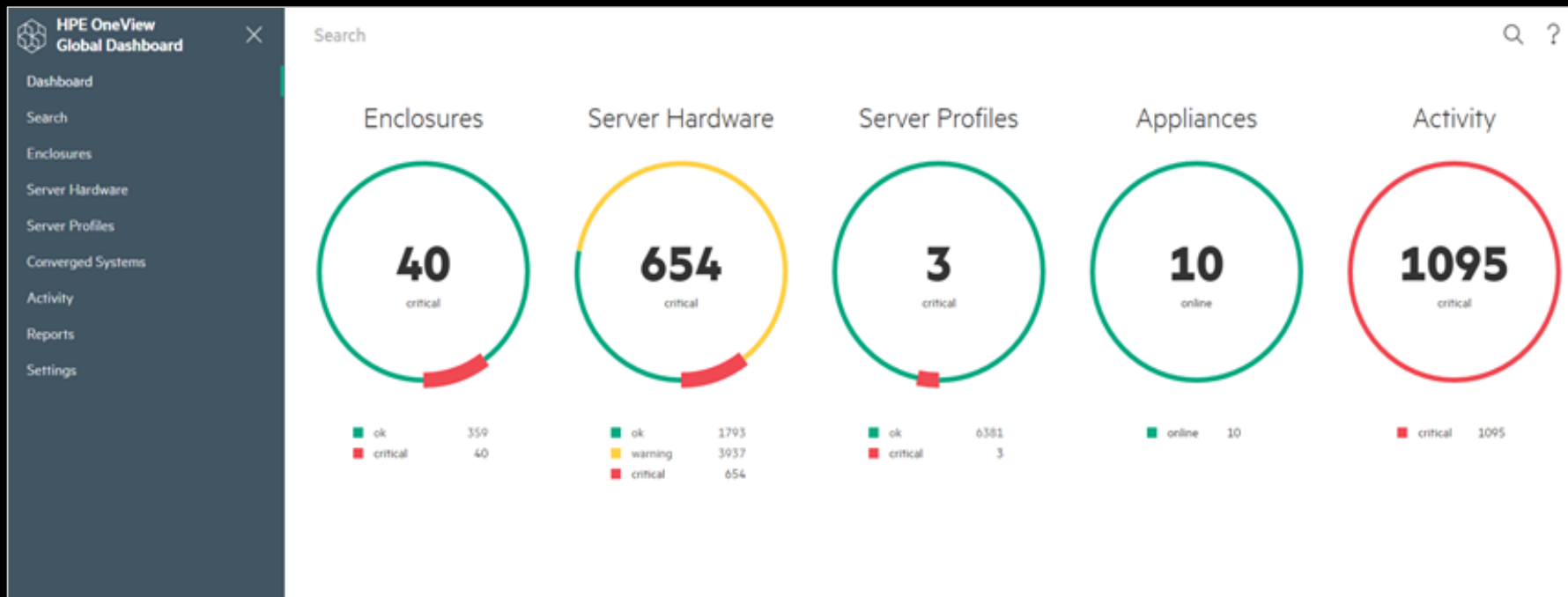


Legend

- ▲ VM with low IO
- ▲ VM with medium IO
- ▲ VM with high IO

HPE ONEVIEW

HPE ONEVIEW GLOBAL DASHBOARD IN ACTION - HEALTH STATUS



Green A healthy status

Yellow An event has occurred that might require your attention

Red A critical condition that requires your immediate attention

Global intelligence

Powered by HPE InfoSight

WHAT'S AVAILABLE TODAY



Predictive analytics

- Data analytics for server security
- Predictive data analytics for parts failure
- Many new analytics
- Email notification of alerts



Global learning

- Server Wellness Dashboard
- Global inventory of servers
- Global server warranty reports



Improved support

- Automatic collection of server telemetry and sensor data
- Global server warranty reports
- HPE support access to AHS files
- Manual case creation



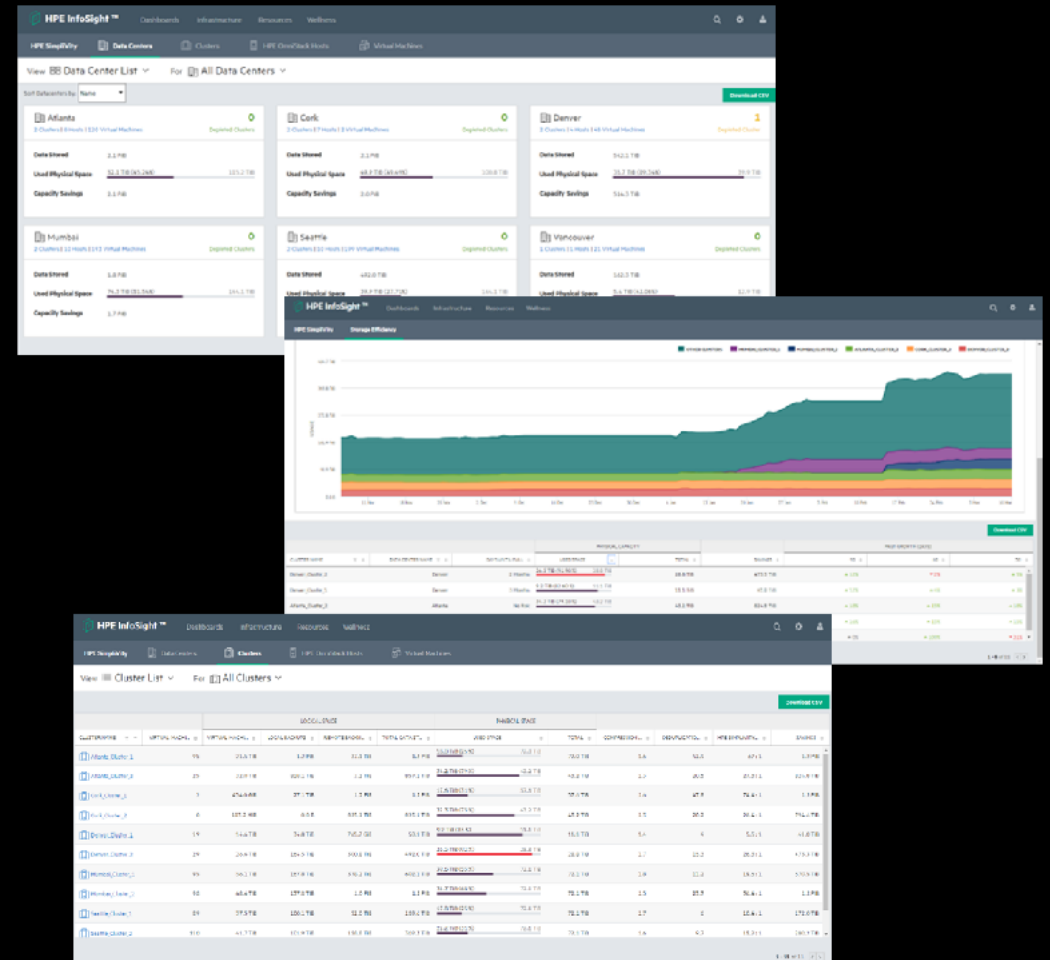
INFOSIGHT FOR HPE SIMPLIVITY

Intelligence changes everything

HPE InfoSight brings simplified, AI-driven operations to transform how infrastructure is managed and supported

InfoSight for HPE SimpliVity

- Provides system details at the federation, cluster, and node levels including historic capacity utilization trends, resource consumption and prediction to full
- Provides visibility to top performing VMs
- Alleviates support issues and reduces operational expenses with automated wellness alerts and case creation
- Provides a unified view of HPE assets



Announcing Commvault Protection for SimpliVity and dHCI

HPE Hyperconverged Platform Protection



HPE SimpliVity



HPE Nimble dHCI



Agentless VM Backup and Recovery with
Commvault 'Virtual Server Agent'

Application aware backups

Live Mount and Live Recovery of VM data

Live Sync Direct VM Replication

Fast efficient VM backups with flexible
recovery options

Nimble snap integration with Intellisnap

Commvault + HPE: The holistic approach

Find out more at www.commvault.com/supported-technologies/hpe

Multi-cloud connected



HPE SimpliVity

Intelligent HCI for general purpose workloads, edge, and ROBO

Cloud Elasticity & Scalability



Industry-leading data coverage



Commvault Command Center™

Commvault Complete™ Backup & Recovery



Hewlett Packard
Enterprise

QUESTIONS?





**Hewlett Packard
Enterprise**

Thank You



Commvault

Perfect Hybrid-Cloud Solution

PRESENTED BY

Stephen Siu

Solution Architect



Agenda

- Commvault Profile
- Mixed & Hybrid-Cloud Environments
- Video Demo

Gartner Magic 2020 Quadrant and The Forrester Wave

Figure 1. Magic Quadrant for Data Center Backup and Recovery Solutions

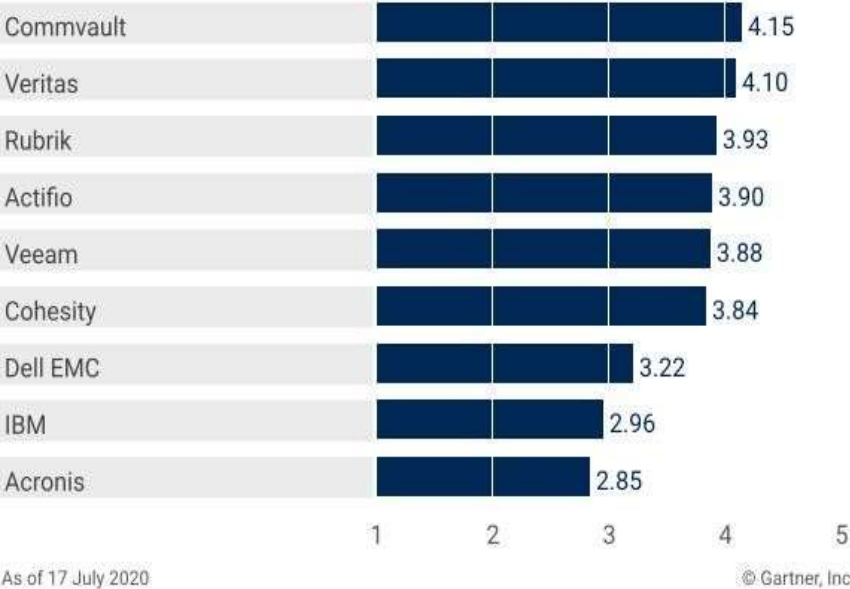


THE FORRESTER WAVE™
Data Resiliency Solutions
Q3 2019

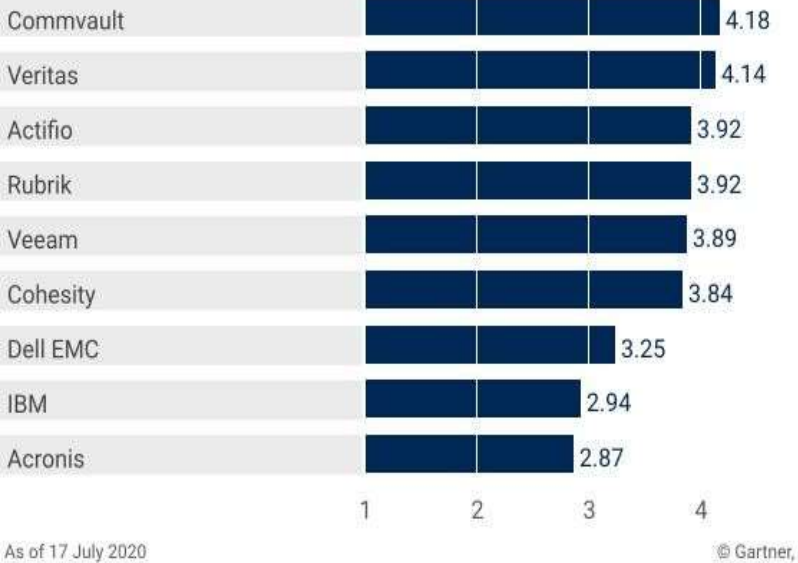


Gartner Magic Quadrant 2020

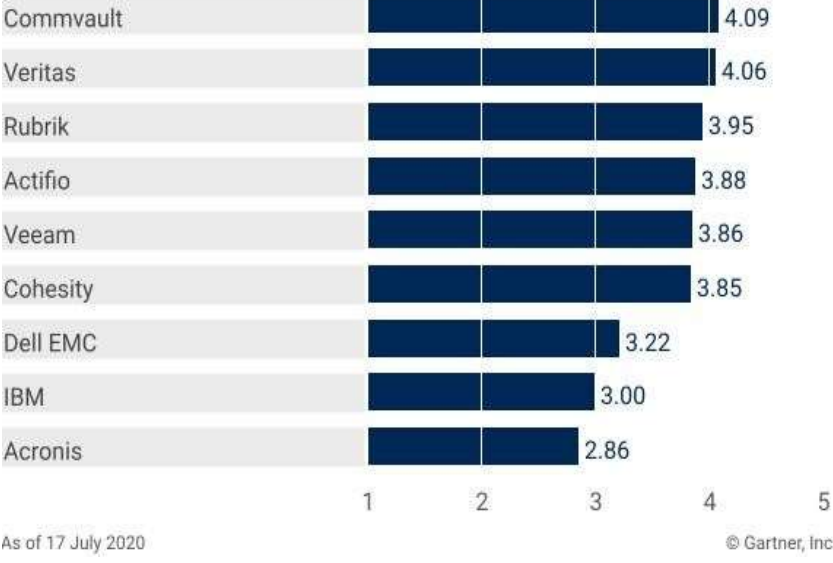
Product or Service Scores for Public Cloud Environments



Product or Service Scores for Virtual Environments



Product or Service Scores for Physical Server Environments



Public Cloud Environments



Virtual Environments

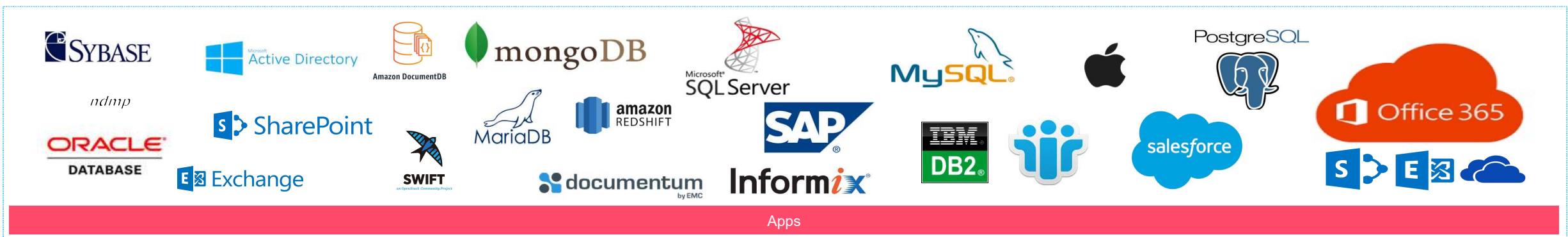
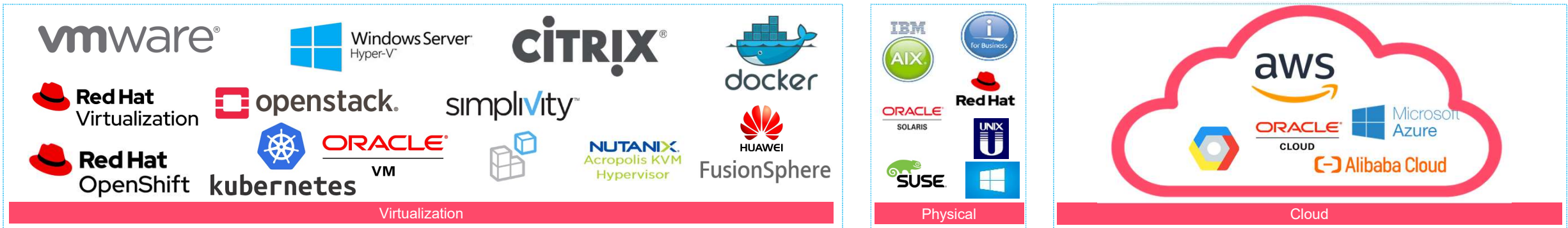


Physical Server Environments




Mixed & Hybrid-Cloud Environment

Commvault Supporting Platforms



Data Platform needs to fully embrace cloud services

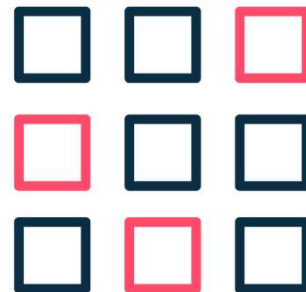
	Easy	Seamless	Secure	Orchestrated	Flexible		
	Policy	Store	Move	Access	Secure	Search	Analyze
	Backup to Cloud	Backup on Cloud	DR on Cloud	Workload portability	Analytics & Actions		
vmware	Y	Y	Y	Y	Y	Y	Y
Azure	Y	Y	Y	Y	Y	Y	Y
aws	Y	Y	Y	Y	Y	Y	Y
ORACLE	Y	Y	Y	Y	Y	Y	Y
Google Cloud Platform	Y	Y					
Alibaba Cloud	Y	Y					
Cloud Platform	Storage Svcs	Compute Svcs	Key Mgmt. Svcs	File Svcs	AI Cognitive Svcs		

Commvault secure data within the Public Cloud



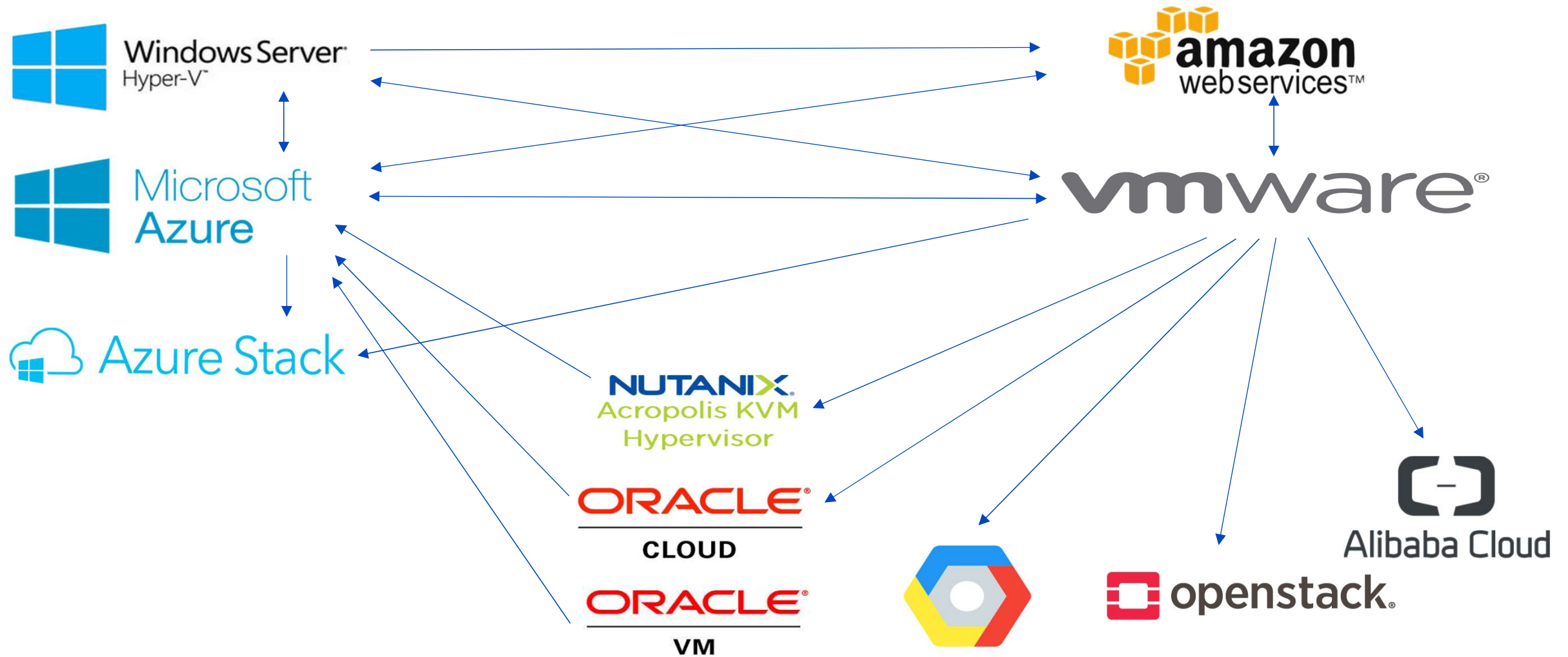
- Authentication, Authorization & Auditing
 - Commvault authenticate users against one of many identity source – Active Directory, Domino Directory, Jump Cloud, RADIUS etc.
- Public Cloud Security
 - Commvault Securely transfer data between existing on premises data centers and Public Cloud
- Data Encryption
 - Commvault encrypt all the data on disk/cloud storage
 - Integrate with AWS/Azure Key Management

Commvault® lowers Cloud infrastructure costs



- Dynamic power management leverages flexibility
- Commvault Media Agents in AWS /Azure /VMware can be automatically powered down when not in use
 - Reduces compute costs
 - Media Agents will be automatically powered back on when required for data protection or data recovery operations
 - No manual intervention needed
- Deduplication
 - Save the Backup time
 - Save the Network bandwidth
 - Save the Disk/Cloud storage cost

Cross Hypervisor conversion



Cloud storage support

- **Azure**

- Use container's default storage class
- Hot
- Cool
- Hot/Archive (Combined Storage Tiers)
- Cool/Archive (Combined Storage Tiers)
- Archive

- **Ali Cloud**

- Object Storage Service

- **Google Cloud**

- Multi-Regional
- Regional
- Nearline
- Coldline

- **Amazon**

- Standard
- Standard - Infrequent Access
- One Zone - Infrequent Access
- Intelligent - Tiering
- Standard/Glacier (Combined Storage Tiers)
- Standard-IA/Glacier (Combined Storage Tiers)
- One Zone-IA/Glacier (Combined Storage Tiers)bject
- Intelligent-Tiering/Glacier (Combined Storage Tiers)
- Standard/Deep Archive (Combined Storage Tiers)
- Standard-IA/Deep Archive (Combined Storage Tiers)
- One Zone-IA/Deep Archive (Combined Storage Tiers)
- Intelligent-Tiering/Deep Archive (Combined Storage Tiers)
- Glacier
- Deep Archive
- Redundancy Storage (RRS)

- **Oracle Cloud**

- Oracle Infrastructure Object Storage
- Archive Storage
- Archive Storage Classic

- **IBM Cloud**

- IBM Cloud Object Storage
- IBM Cloud Object Storage (S3-Compatible)

- **VMware vCloud**

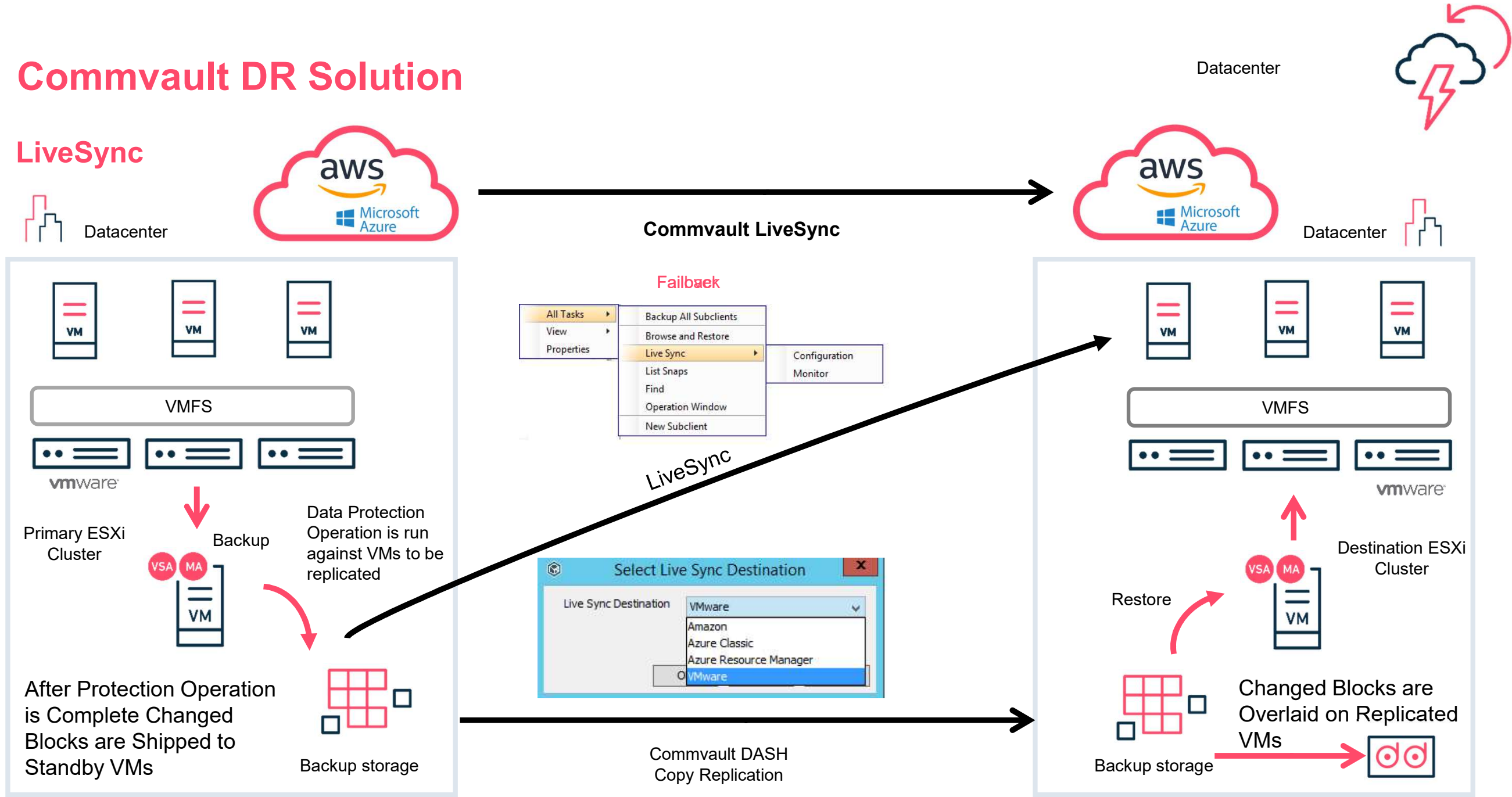
- Air Object Storage

- **S3 Compatible**

- Object Storage

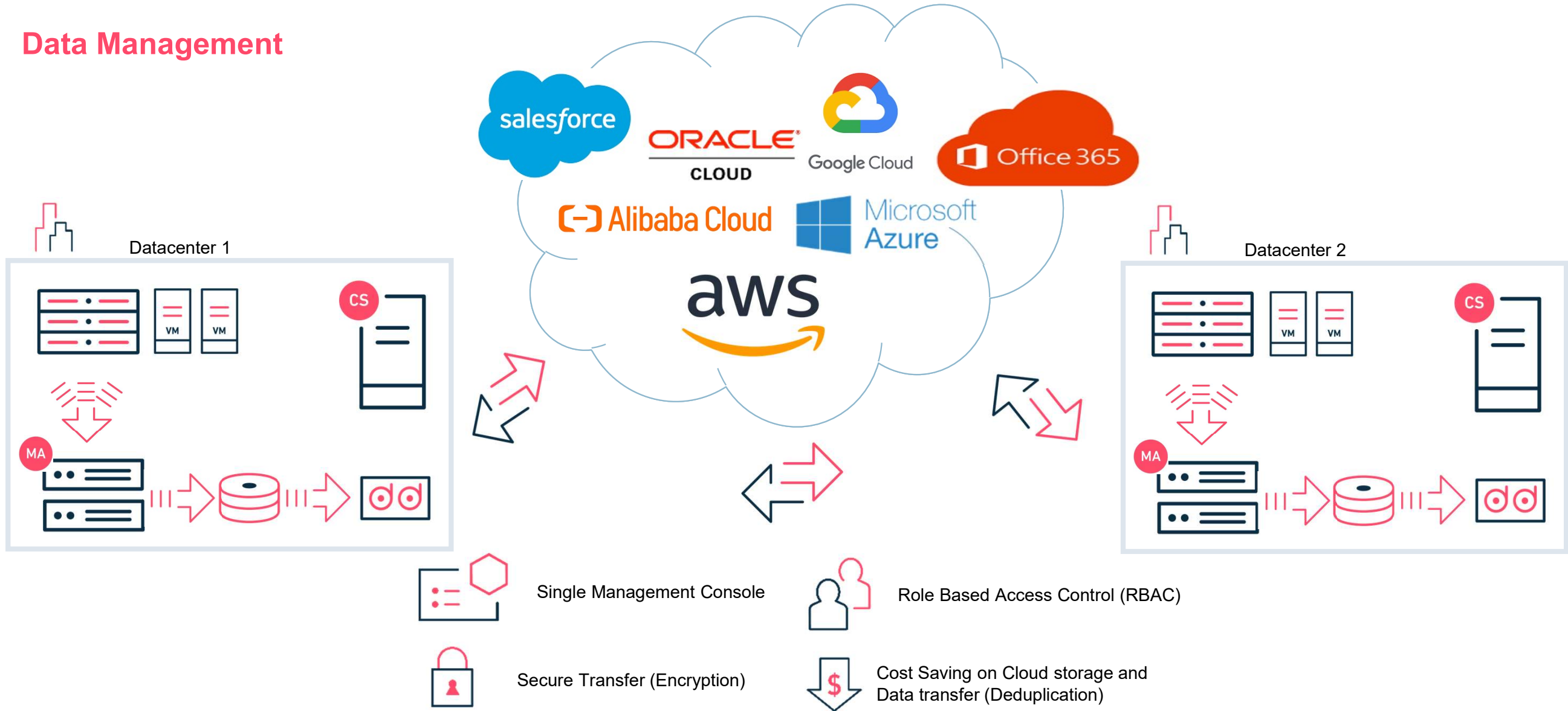
Commvault DR Solution

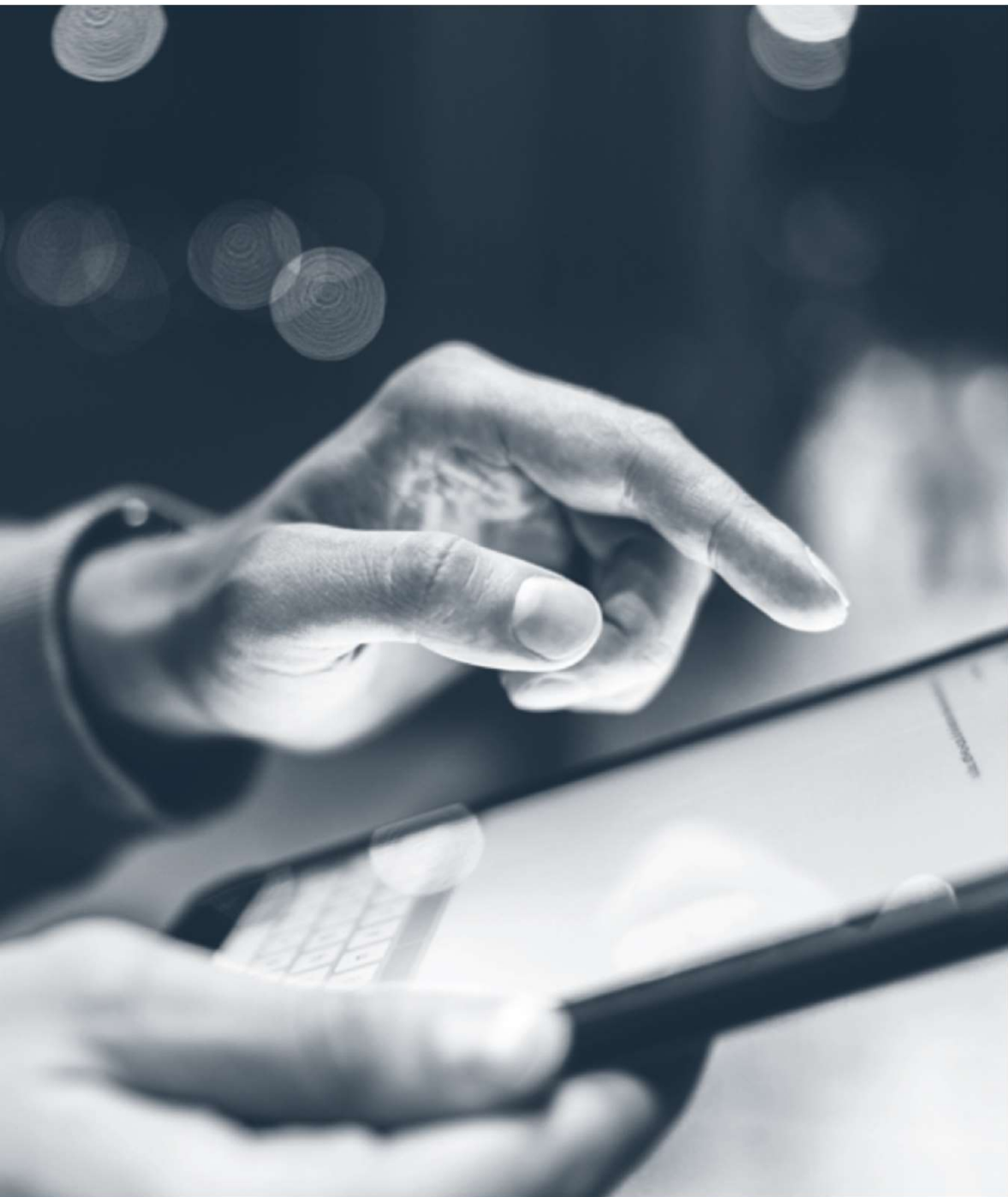
LiveSync



Commvault Multi-Cloud Solution Overview

Data Management





Video Demo Protect & Migrate on Cloud

Thank you.
