Journey to 360 Data Management

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Sales Director

Information is Your Most Critical Asset …

VERITAS

And the One You Won't Outsource

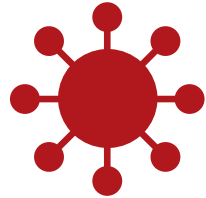**APPLICATION** ▶

INFRASTRUCTURE ▶

DATA

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Challenges with Data Management Today

Complex Cloud Migration

Fragmented Protection/Control

Rising Storage Costs

Stricter Regulations

Slow App Development

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Veritas Can Help

Multi-Cloud Migration

Unified Data Protection
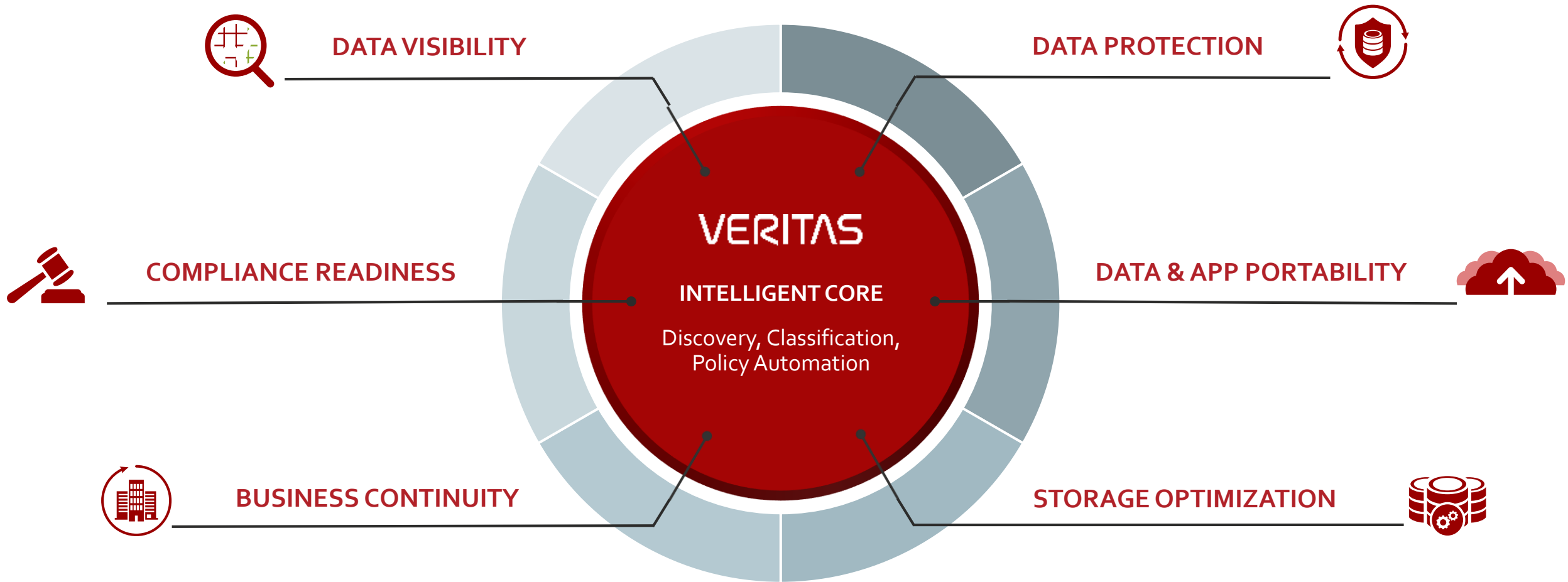
Storage Optimization

Risk Mitigation & Compliance

Streamline App Development

Global Visibility

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Veritas' Unique Approach: 360 Data Management

DATA VISIBILITY

DATA PROTECTION

COMPLIANCE READINESS

DATA & APP PORTABILITY

BUSINESS CONTINUITY

STORAGE OPTIMIZATION

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INTELLIGENT CORE

Discovery, Classification, Policy Automation

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Data Protection

Global Visibility
Veritas | Information Map

Cloud Migration
Veritas | CloudMobility

Scale Out NAS
Veritas | Access

Multi-Cloud Ready

Instant Access
Veritas | Velocity

NetBackup
Data protection and
recovery foundation

Orchestrate Recovery
Veritas | Resiliency Platform

Cloud Snapshots
Veritas | CloudPoint

Next Generation Workloads
Veritas | **HyperScale**

Integrated Appliance
Veritas | NetBackup

amazon
web services

Google Cloud

Microsoft
Azure

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Unified Data Protection for Cloud, Physical and Virtual
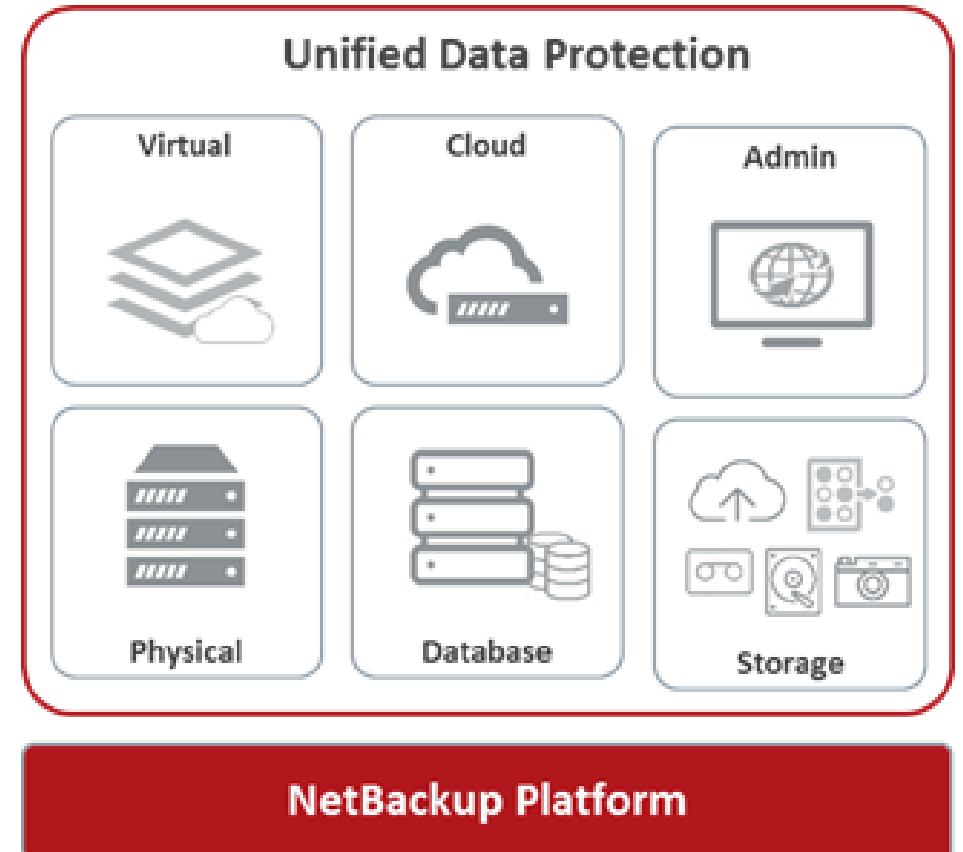## *NetBackup 8.0*

Challenge

- "Data fragmentation, multiple locations and clouds"

- "Too many silo'd tools to manage data"

- "Need to leverage cloud for cloud economics and agility"

Solution: Unified Data Protection

- Unified Data Protection for cloud, physical, and virtual environments

    - New cloud connectors for Azure, OpenStack

    - New Amazon Machine Image to protect workloads from the cloud

- New Virtual Appliance for Remote Offices

- New self service for IT and LOB

Unified Data Protection

Virtual	Cloud	Admin
Physical	Database	Storage

NetBackup Platform

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Visualize Your Data
NetBackup & InfoMap

Information Map unleashes your NBU data to transform your most critical data into visible, actionable intelligence, enabling data decisions that improve operational efficiency, reduce risk and lower IT spend

Information Map enables you to:

- Visualize your data, identifying opportunities to optimise information storage and reduce information risk in 24 hours.

- Take direct action to clean your information house, retaining valuable and regulated data, and expiring the rest confidently.

- Assume control over your data through automatic policy enforcement and based on the inherent value to the business

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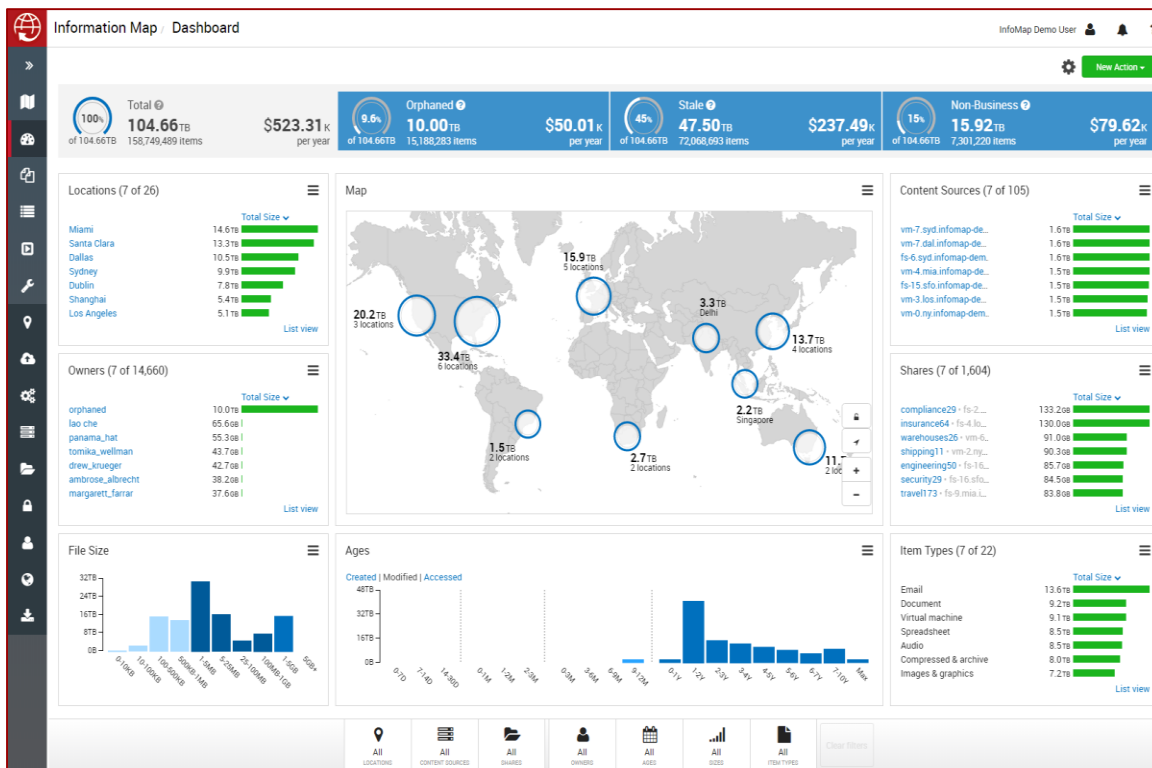
# Integrated Copy Data Management
NetBackup & Velocity

Challenge

- "Struggling to keep pace with data growth"

- "I need access to copies of production data immediately"

- "Copy data sprawl increases security risks"

Solution: NetBackup + Velocity

- New integration with NetBackup eliminates time and cost to re-ingest data

- Rapid, self-service access to data via role based access permissions

- Dramatically reduce copy data sprawl, cost & complexity of creating and storing physical copies

NetBackup Backup Data → Data Ingested into Velocity → Unlimited Instant Virtual Copies
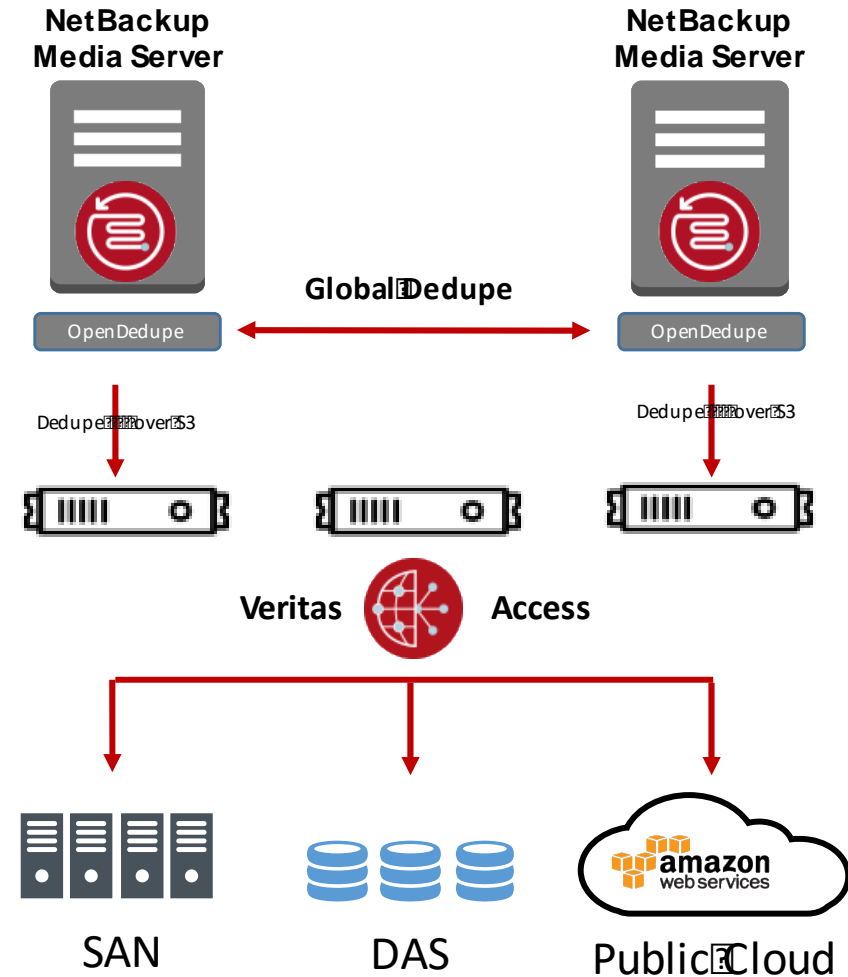
VERITAS
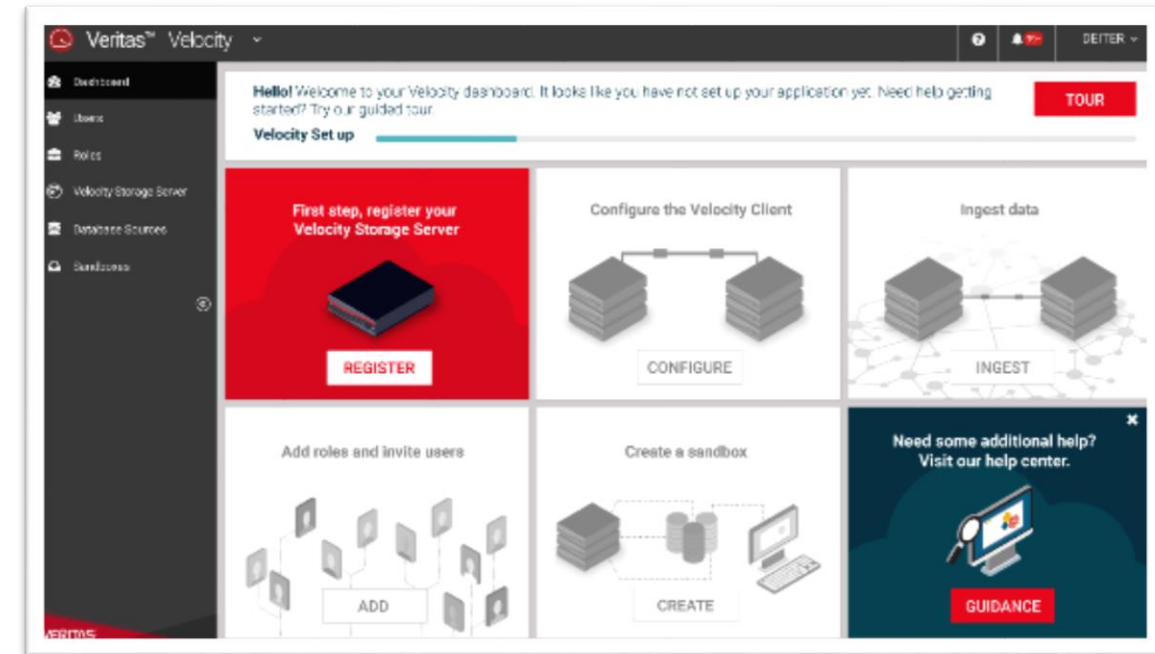
Cost Effective Long Term Storage
NetBackup & Access

Challenge

- "How can I have a cost-effective long term data retention strategy?"

- "How can I reduce tape management and cost?"

- "How will I manage storage utilization in the face of unstructured data growth?"

Solution: NetBackup + Access

- Low cost, flexible alternative for long term data retention

- Eliminate the need for cumbersome, time consuming tape management
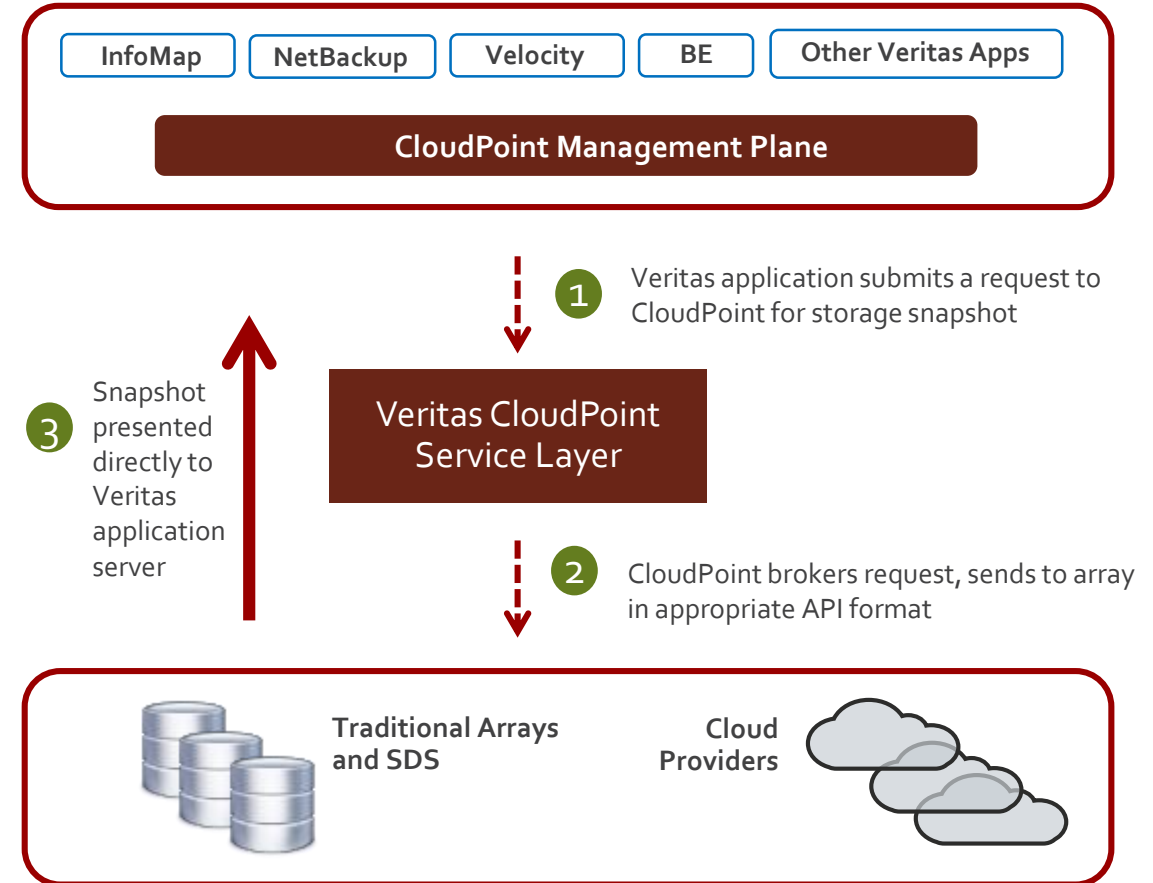
- Cost-effective and resilient scale-out & elasticity

NetBackup Media Server

NetBackup Media Server

Global Dedupe

OpenDedupe

OpenDedupe

Dedupe over S3

Dedupe over S3

Veritas Access

SAN

DAS

Public Cloud

VERITAS™

Modern Workload Protection
CloudPoint for Simplified Snapshot Orchestration

CloudPoint:

- Provides snapshot management orchestration across third party storage products including Arrays, SDS, AWS, Azure, Google Cloud and IBM SoftLayer

- Can also serve as a shared infrastructure component that provides abstraction for other Veritas products via REST API

- Enables rapid development of scripted snapshot plugins in weeks; includes simple deployment and plugin update model

- Allows application integration, scheduling, indexing and policy creation to be provided by Veritas product to enable full solution

| InfoMap | NetBackup | Velocity | BE | Other Veritas Apps |

CloudPoint Management Plane

1 Veritas application submits a request to CloudPoint for storage snapshot

Veritas CloudPoint Service Layer

3 Snapshot presented directly to Veritas application server

2 CloudPoint brokers request, sends to array in appropriate API format

Traditional Arrays and SDS

Cloud Providers

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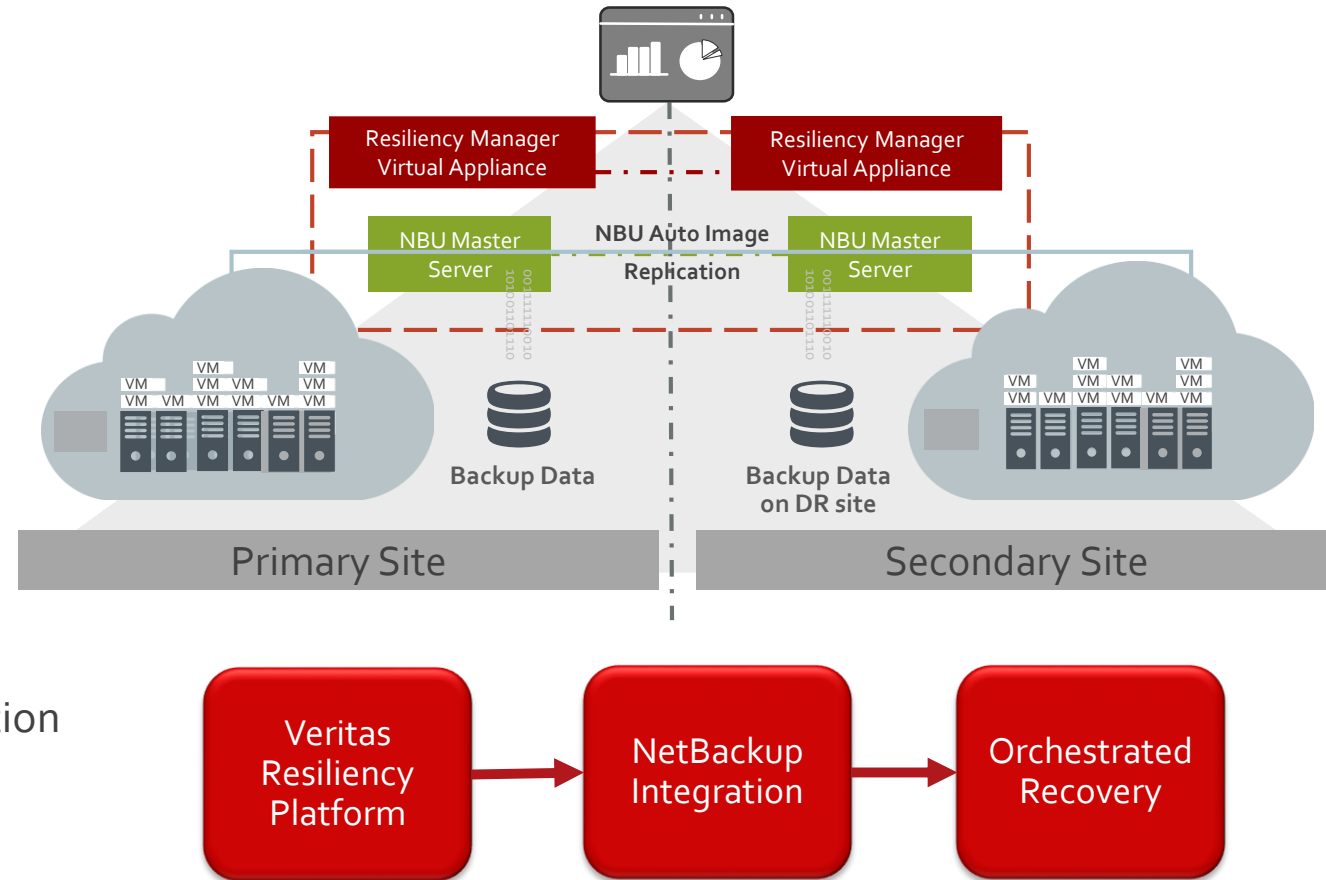
Predicable Integrated Resiliency
NetBackup & Veritas Resiliency Platform

Challenge

- "How can I recover 1000's virtual machines quickly?"

- "I struggle to migrate applications"

- "I need to test DR regularly to remain compliant "

Solution: NetBackup + VRP

- New single-click migration and recovery using NetBackup data.

- Assured predictability by orchestrating the Application Recovery across all Service Levels

- Simple way to test disaster recovery readiness

Resiliency Manager Virtual Appliance

Resiliency Manager Virtual Appliance

NBU Master Server

NBU Auto Image Replication

NBU Master Server

Backup Data

Backup Data on DR site

Primary Site

Secondary Site

Veritas Resiliency Platform → NetBackup Integration → Orchestrated Recovery

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One-Click Cloud Workload Migration

CloudMobility Migration Solution

✓ Multi- workload and multi-cloud support

✓ Pre-migration testing & failback safeguard

✓ Built-In Low RPO (5 min) Data Mover

✓ Orchestrated multi-tier or dependent workload migration
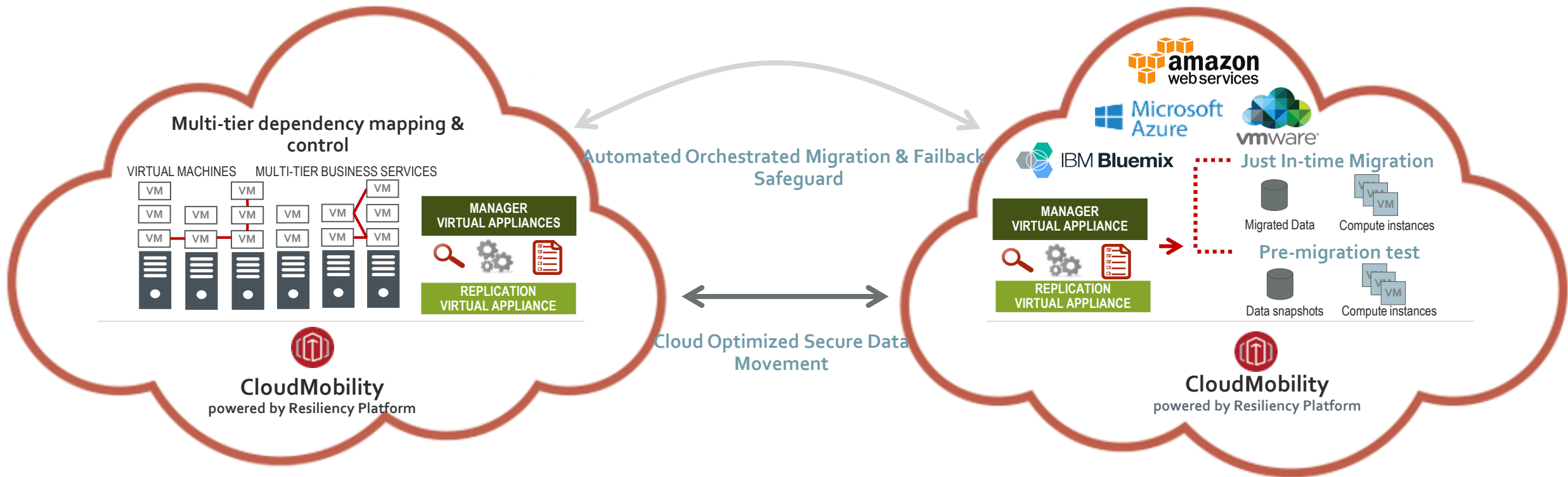
On premises, Traditional or Private Cloud

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Eliminating Complexity with a Scalable and Agile Integrated Solution
Veritas Appliances

Veritas Appliances

- Scale with Data Growth
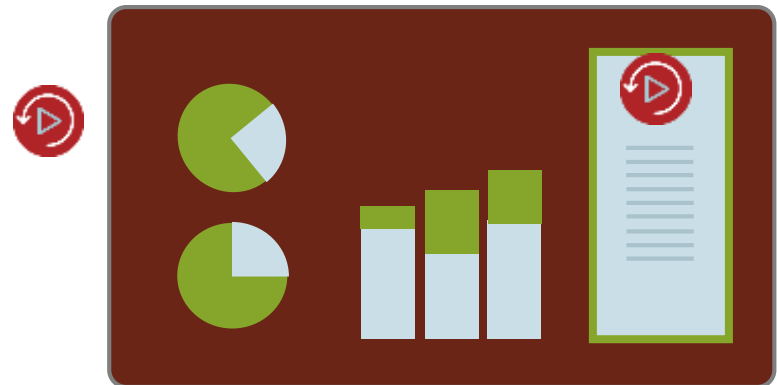- Enhance Resiliency and Performance
- Deliver Converged Solutions for Complex Data Management Problems
- Deliver Operational Efficiency & Insight

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Unified Data Protection for SMB
Veritas Backup Exec

Physical   Virtual   Cloud

One License   One Interface

- Complete protection across physical, virtual & cloud from a single platform

- Backup & Recovery across desktops/laptops, server infrastructure, file servers and all applications

- Enables organization to meet recovery objectives from hours to seconds, minimizing business downtime

- Simple to configure and operate - minimizes time spent "doing" backup

- Trusted solution used by 2.2 million organizations in 200 countries worldwide

SMB Cost of Downtime*

1 Minute	1 Hour	1 Day	1 Week
$208	$12,500	$150,000	$750,000

* Laura DuBois, IDC

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Packaging Simplicity: 360 Data Management Suite

	BRONZE	SILVER	GOLD	Products
Data Protection	✓	✓	✓	• NetBackup Complete Edition
Data Visibility	✓	✓	✓	• Information Map
Compliance Readiness	✓	✓	✓	• Enterprise Vault File Management
Business Continuity		✓	✓	• Resiliency Platform
Data/Workload Portability		✓	✓	• CloudMobility/Resiliency Platform
Storage Optimization			✓	• Velocity & Access

- Single license meter = pricing per TB (front-end)
- No minimum purchase required

- 100% Subscription licensing
- Attractive discount vs individual products

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360 Data Management Suite – License Models

	BRONZE	SILVER	GOLD	Subscription	Hybrid
Data Protection	✔	✔	✔		• Perpetual
Data Visibility	✔	✔	✔		
Compliance Readiness	✔	✔	✔	• Subscription	
Business Continuity		✔	✔		• Subscription
Data/Workload Portability		✔	✔		
Storage Optimization			✔		

New Veritas customers or new deployments

Existing NetBackup customers or expanding deployments

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Software-Defined
Storage

Global Visibility
Veritas | Information Map

Scale Out NAS
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amazon
web services

Google Cloud

Microsoft
Azure

Next Generation Workloads
Veritas | HyperScale

Legacy Apps in the Cloud
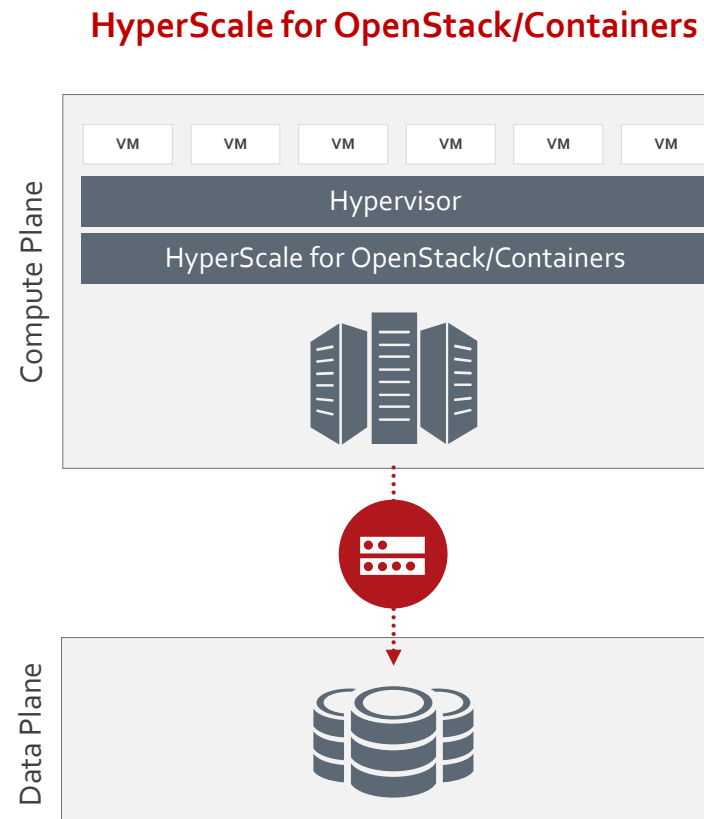Veritas | InfoScale

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Optimize Applications for Mode 2
SDS for the New Architectures

| Software defined storage for **hybrid cloud**	Software defined storage for **hyper-scale environments**	Software defined storage for **unstructured data**

InfoScale

amazon web services

amazon web services

Container

Multi-tier business service

Enterprise Application

HyperScale for OpenStack/Containers

Compute Plane

| VM | VM | VM | VM | VM | VM |

Hypervisor

HyperScale for OpenStack/Containers

Data Plane

Access

openstack   vmware   amazon web services™

Access

Policy Based Management

Multiple Access Protocols

| File | Block | Object |

Global Namespace

Shared   Cloud   Direct Attached HDD

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SDS for Private Clouds
HyperScale for OpenStack

- Leverages commodity hardware

- Very high application performance

- Storage Quality of Service

- Integrated data protection with zero backup window

- Confidently deploy Tier 1 applications on OpenStack

Compute Plane

VM | VM | VM | VM | VM | VM

Hypervisor

HyperScale for OpenStack

Data Plane

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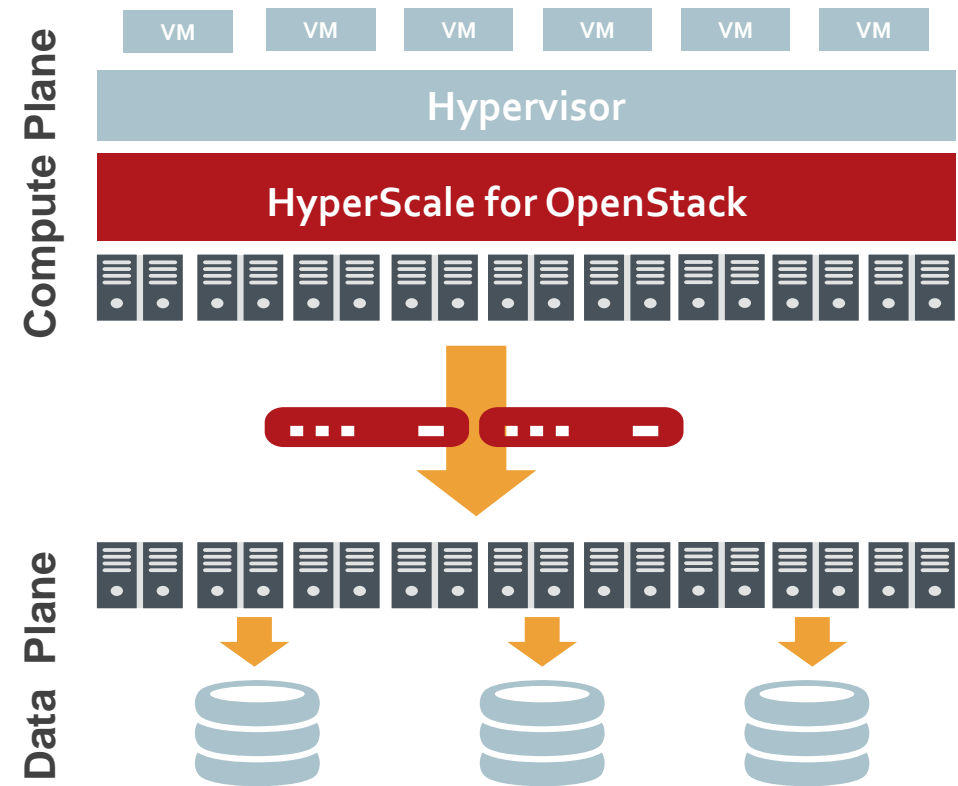
SDS for Private Clouds
HyperScale for Containers

Storage Quality of Storage

Optimized application performance

Leverages commodity hardware

Integrated data protection with a zero backup window

Compute Plane

docker docker docker docker docker docker docker

Containers Orchestration

HyperScale for Containers

Data Plane

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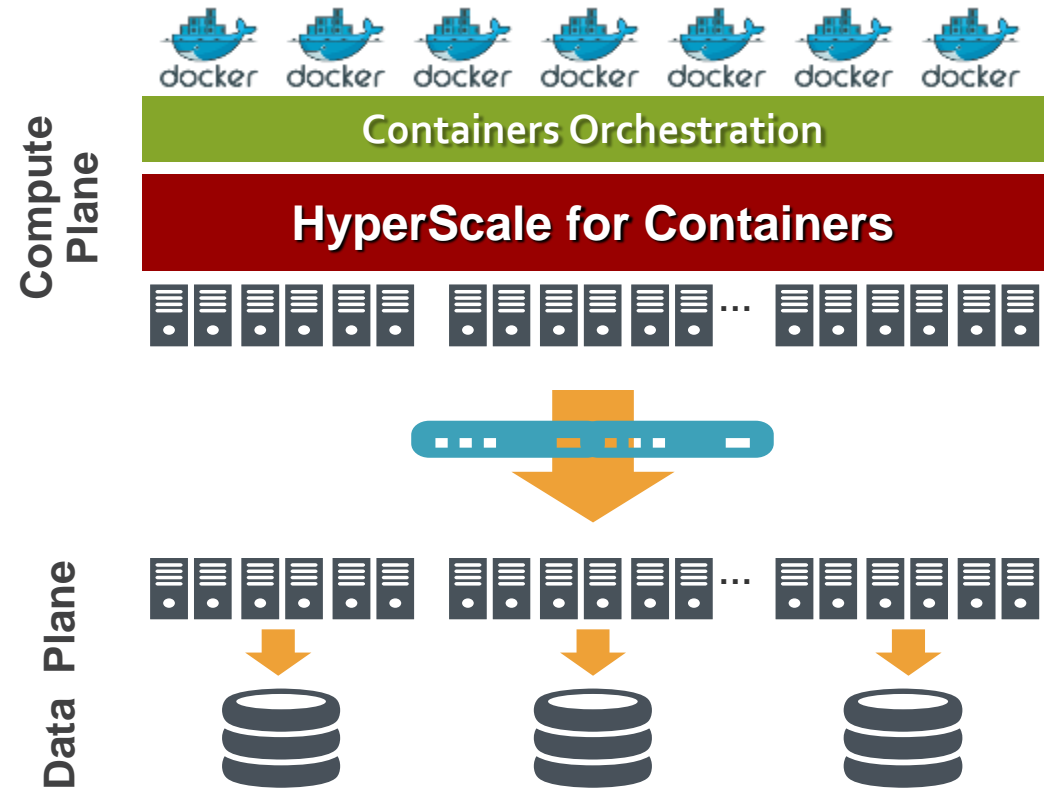
Optimize Application Performance

Access – Scale Out NAS for Any Storage

- Cloud: Seamlessly migrate workloads to and from private and/or public clouds

- Performance: Billions of files with differing attributes

- Heterogeneity: Multiple storage architectures

- Data protection: Embedded NetBackup client

- Cost: Access is 60-70% less costly

NFS   SMB   S3

Hybrid Cloud   SAN   DAS

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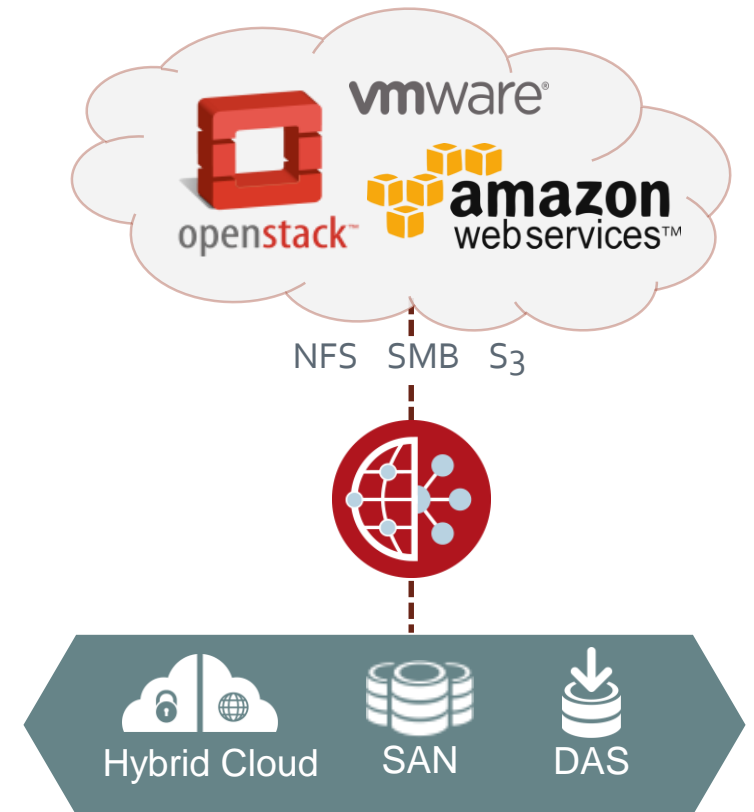
Compliance
Readiness

General Data Protection Regulation
Main Tenets

- GDPR has broad applicability

- Be accountable for your data

- No more data hoarding

- The 'Right To Be Forgotten'

- Mandatory breach notification

- Penalty for Non-Compliance:
  UP TO **4%** OF GLOBAL A**NNUAL TURNOVER**

VERITAS™

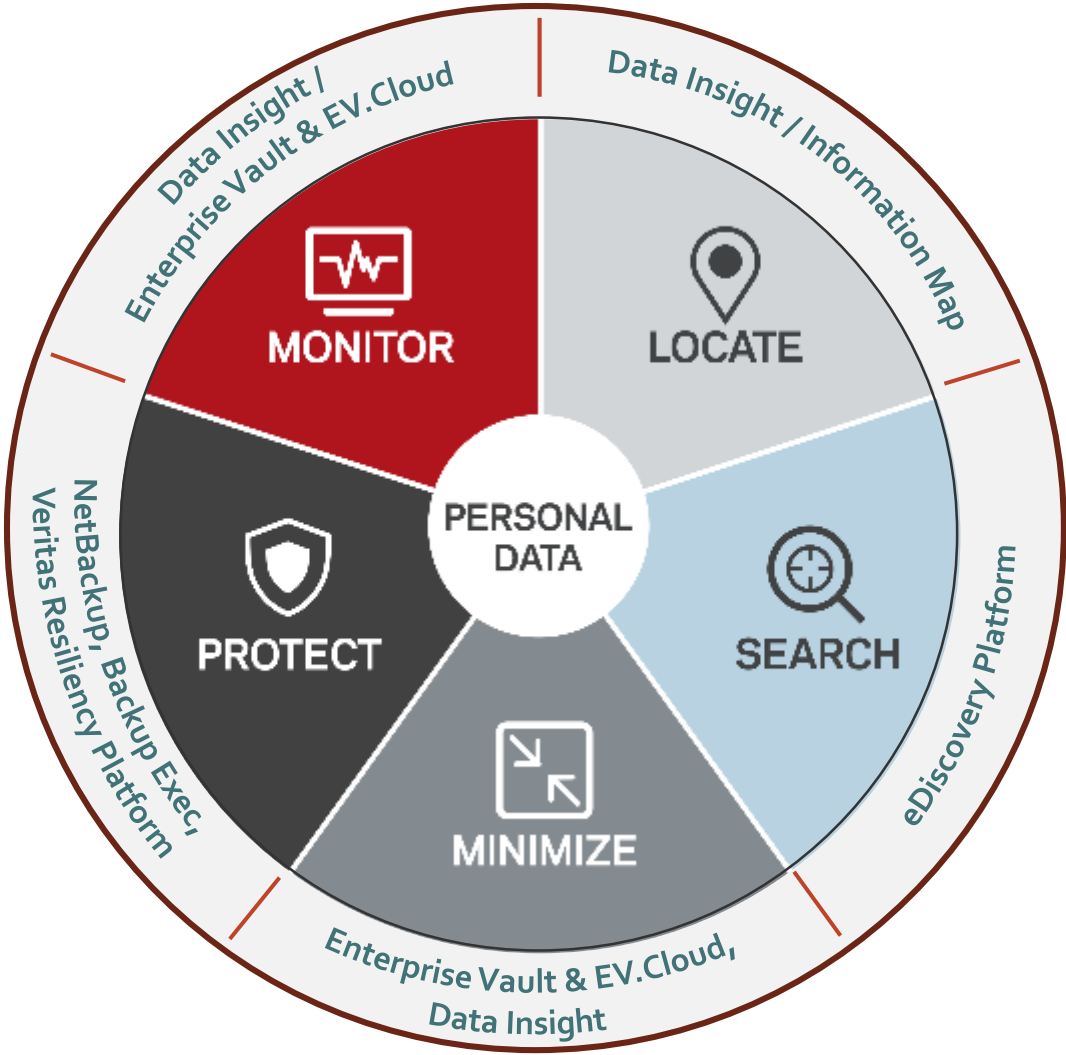# Five Capabilities Required for GDPR Compliance

LOCATE

SEARCH

MINIMIZE

PROTECT

MONITOR

VERITAS™

Veritas has a Comprehensive Solution for Regulatory Compliance Readiness

VERITAS

Data Protection

Software-Defined Storage

Compliance Readiness

VERITAS

Thank you!

Javier Rodriguez

Sales Director

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