

Resiliency and Disaster Recovery in a Containerized world

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InfoScale Outbound Product Manager,
EMEA

Veritas: Industry Leader for 30+ Years

Gartner
18x
LEADER

for Enterprise Backup and Recovery Software Solutions

91%

of the Fortune 100 Trust Veritas

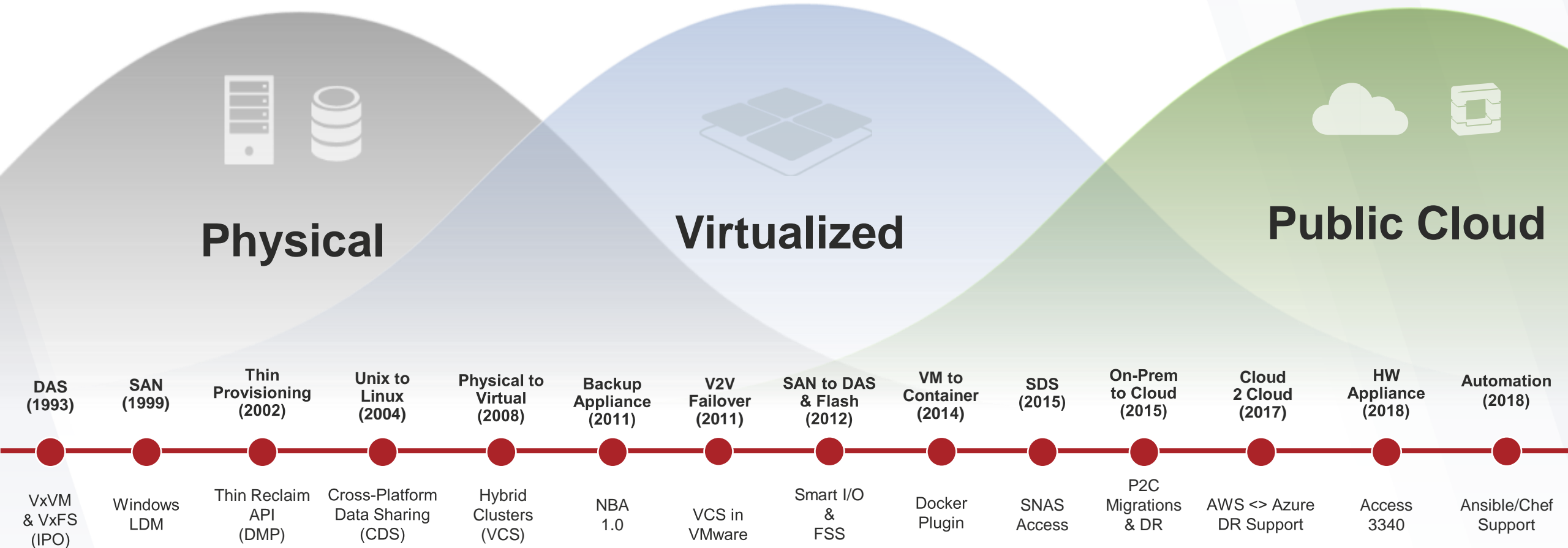
Gartner
15x
LEADER

for Enterprise Information Archiving

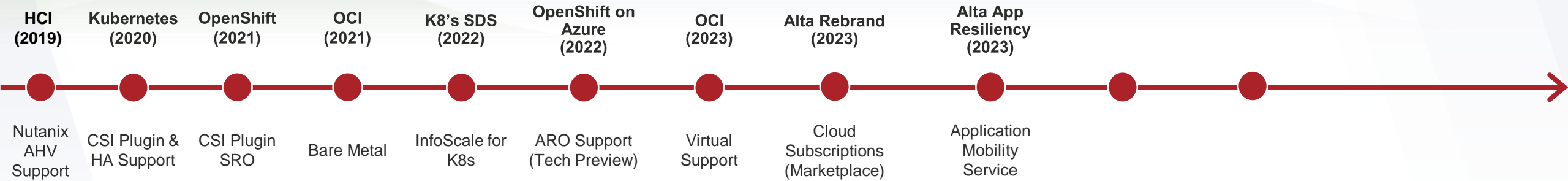
						
20/20	20/20	18/20	20/20	15/15	10/10	19/20
Largest Financial Services Companies	Largest Healthcare Companies	Largest Energy Companies	Largest Commercial Banks	Largest Telecom Companies	Largest Pharmaceutical Companies	Largest Technology Companies

						
6,000+	20,000+	80,000+	2,000+	2,200+	800+	500+ EB
Employees Worldwide	Global Partners	Global Customers	Developers Worldwide	Global Patents	Supported Workloads	Data Under Management

InfoScale - Innovation & Collaboration



Multi-Cloud



InfoScale for Kubernetes



InfoScale for Kubernetes @ a Glance

Stateful Apps



K8S distro



InfoScale SDS Cluster



Any Storage target



DevOps friendly architecture



Provide high performance storage services across DAS, SAN & Cloud



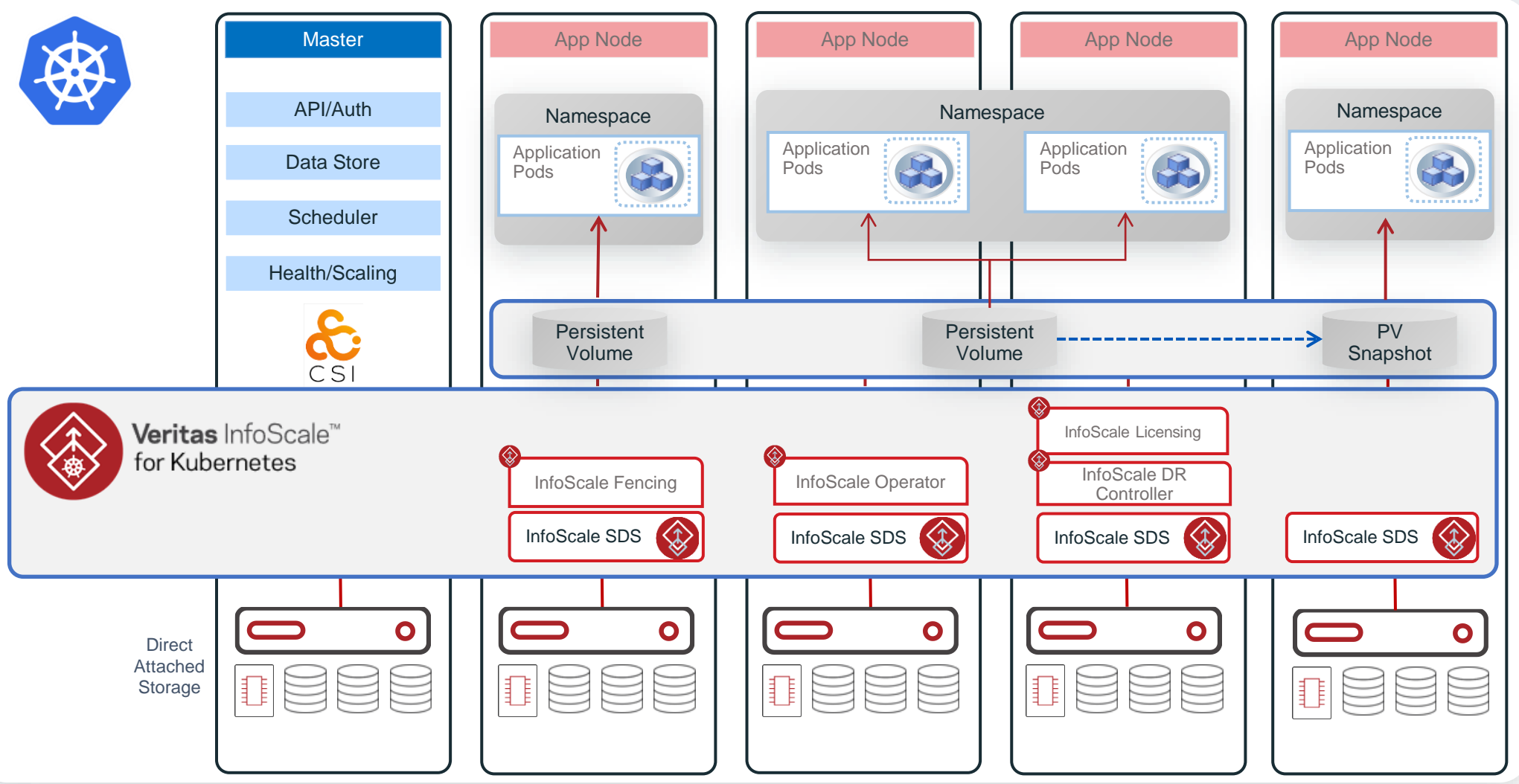
Container native storage for Stateful applications



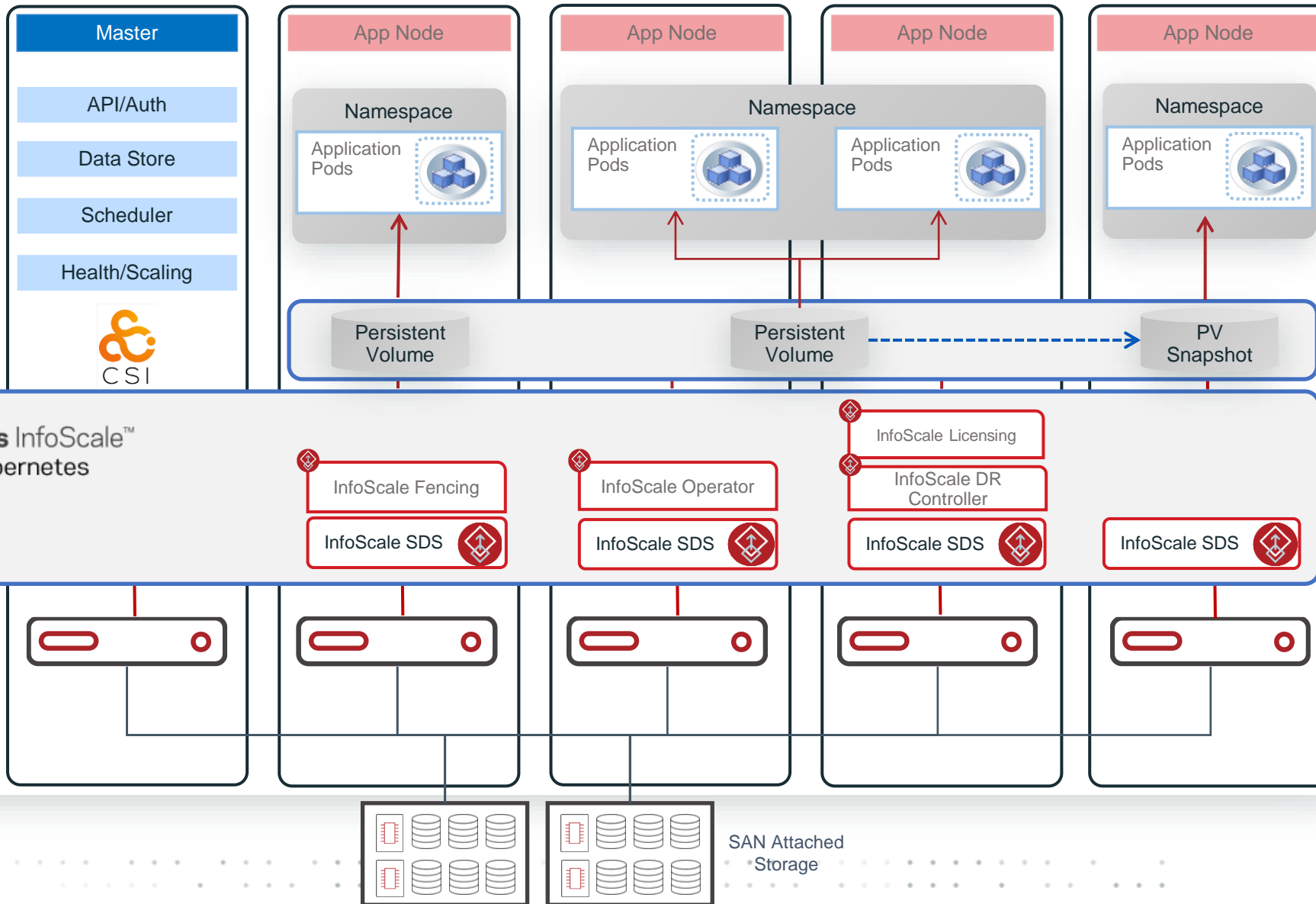
Built-in Resiliency for Applications at Node and Cluster level



Persistent Storage for Kubernetes Architecture



Persistent Storage for Kubernetes Architecture



Resiliency



Challenges to Application Availability



Logical

- Software defect
- User Error
- Data Corruption
- Ransomware
- External (DDoS)
- Internal (Sabotage)



Infrastructure

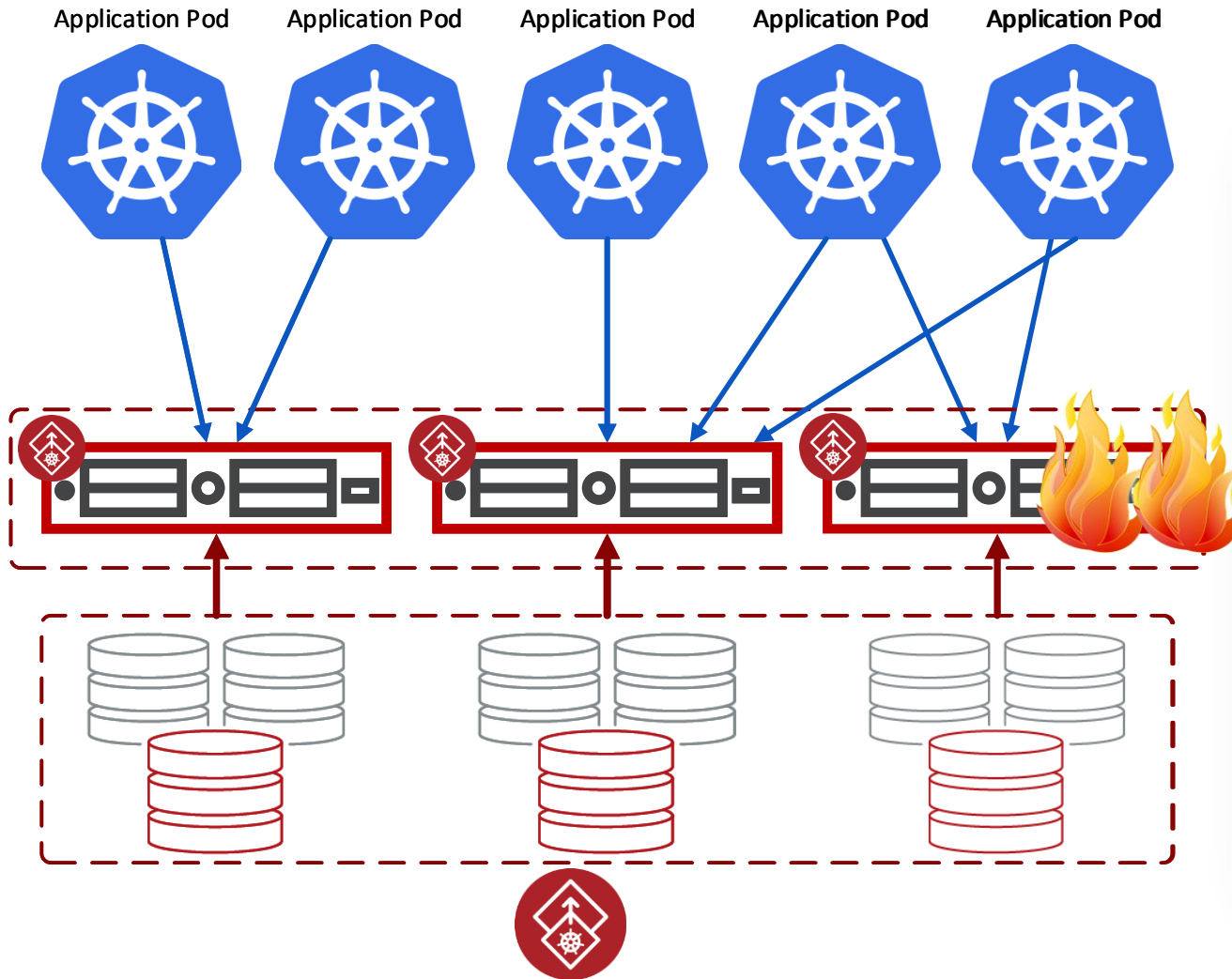
- Compute
- Storage
- Network
- Cloud Platform
- Environmental



Site Wide

- Utilities/Telecom
- Catastrophic Weather
- Geological Event
- Pandemic/Personnel
- Political Unrest
- Unexpected Riches 😊

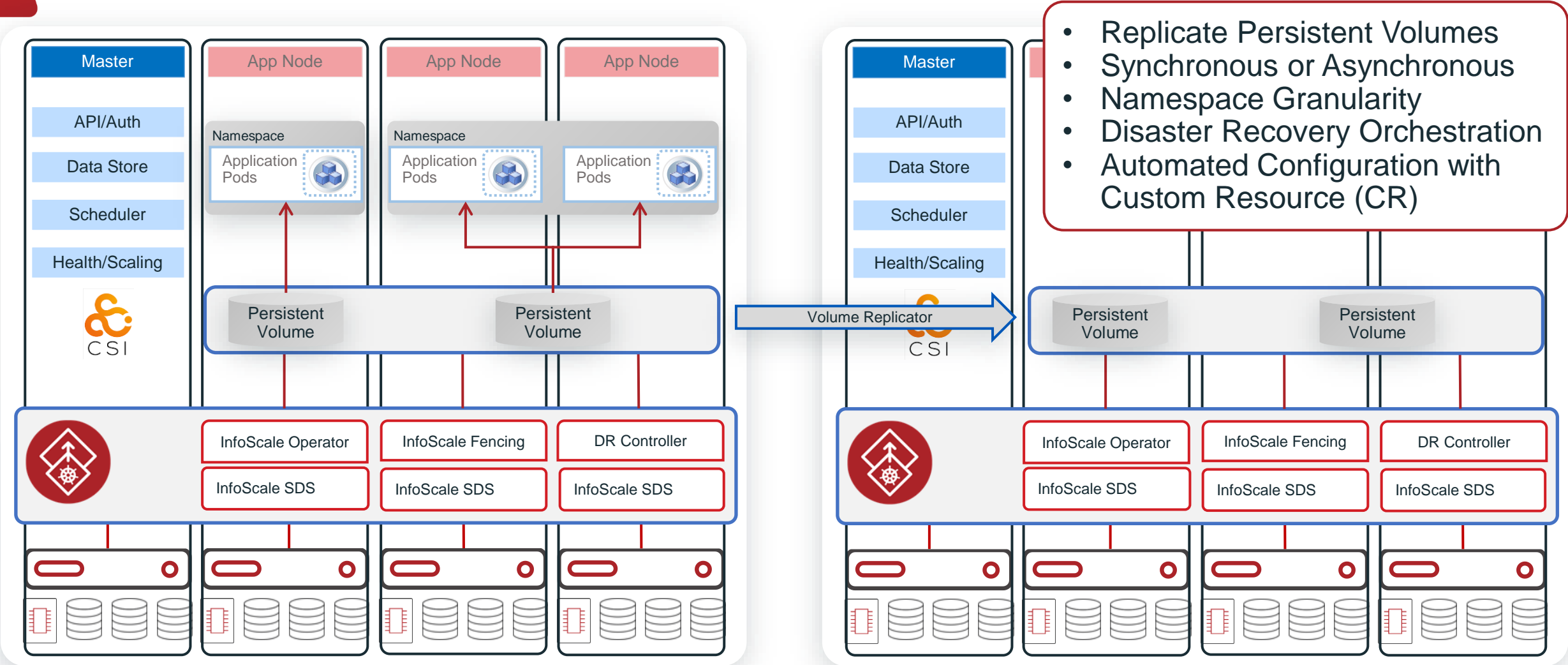
Handling split-brain situations



InfoScale I/O Fencing

- InfoScale I/O fencing enhances Kubernetes method of detecting split brain or node level failures
- Detects node level failures and recovers quicker (in secs) compared to Kubernetes control plane (in mins)
- Ensures that I/O from an unstable or non-responsive container won't damage shared cluster resources

InfoScale Replication and Disaster Recovery for Kubernetes



Disaster Recovery for Kubernetes Demo

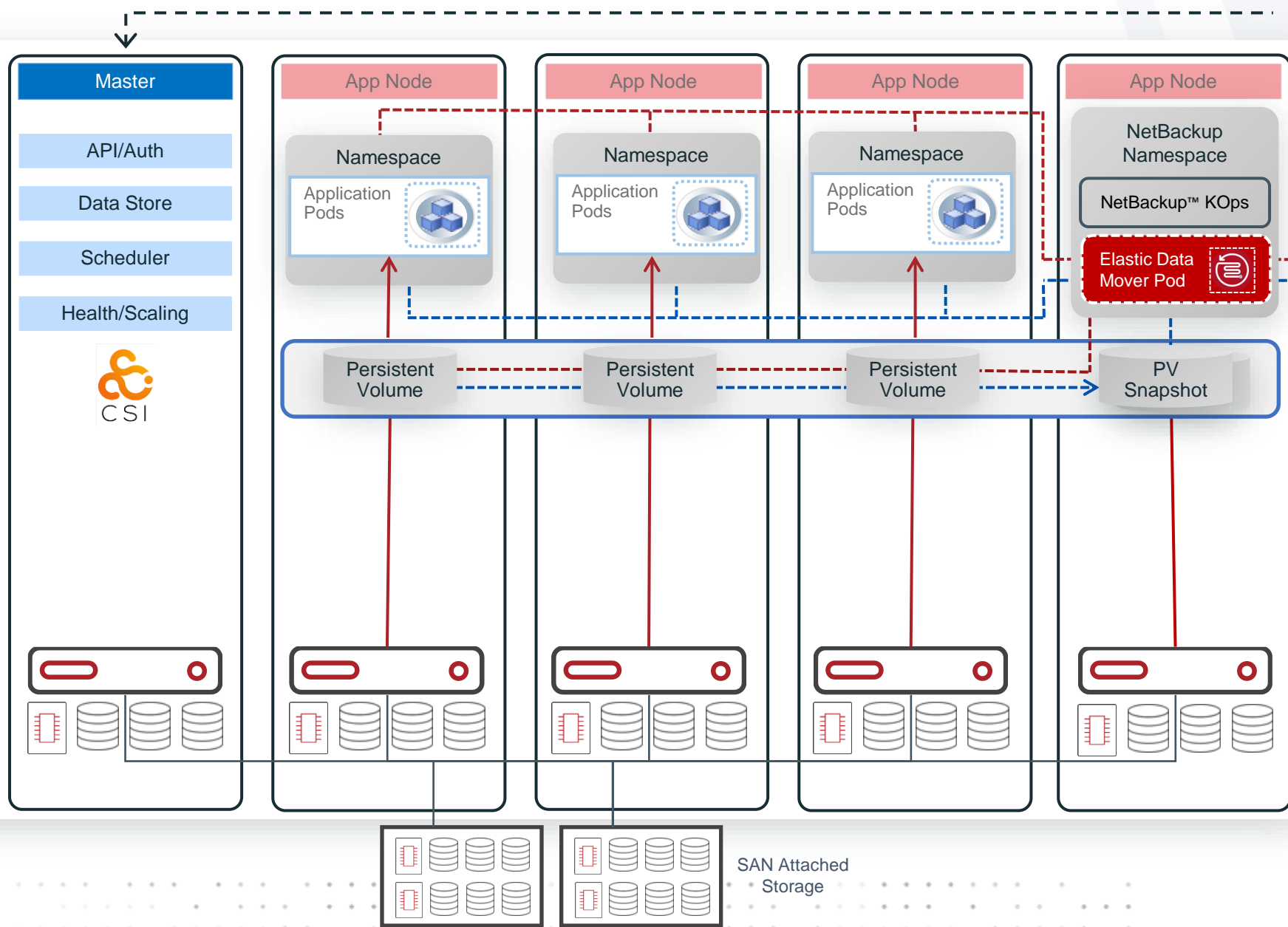
The screenshot shows the Red Hat OpenShift console interface. The left sidebar contains navigation options: Administrator, Home, Operators (with sub-items OperatorHub and Installed Operators), Workloads, Networking, Storage, Builds, Observe, Compute, User Management, and Administration. The main content area is titled "Installed Operators" and displays a table of installed operators. The table has columns for Name, Namespace, Managed Namespaces, Status, Last updated, and Provided APIs. Four operators are listed: CrowdStrike Falcon Platform - Operator, InfoScale DR Manager, InfoScale Licensing Operator, and InfoScale SDS Operator. All operators show a "Succeeded" status and are "Up to date".

Name	Namespace	Managed Namespaces	Status	Last updated	Provided APIs
CrowdStrike Falcon Platform - Operator 0.6.2 provided by CrowdStrike	falcon-operator	All Namespaces	Succeeded Up to date	Apr 17, 2023, 7:53 AM	Falcon Node Sensor
InfoScale™ DR Manager 8.0.201 provided by Veritas Technologies LLC	infoscale-vtas	All Namespaces	Succeeded Up to date	Apr 17, 2023, 8:00 AM	Data Replication Disaster Recovery Plan DNS Global Cluster Membership
InfoScale™ Licensing Operator 8.0.200 provided by Veritas Technologies LLC	infoscale-vtas	All Namespaces	Succeeded Up to date	Apr 17, 2023, 7:53 AM	License
InfoScale™ SDS Operator 8.0.201 provided by Veritas	infoscale-vtas	All Namespaces	Succeeded Up to date	Apr 17, 2023, 7:53 AM	InfoScale Cluster InfoScale Storage Pool

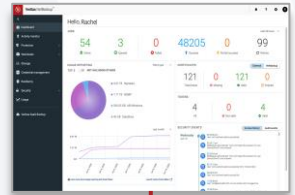
Data Protection



Data Protection for Kubernetes Architecture



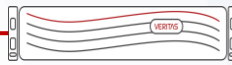
NetBackup Primary Server



NetBackup Media Server



Storage



NetBackup Appliances

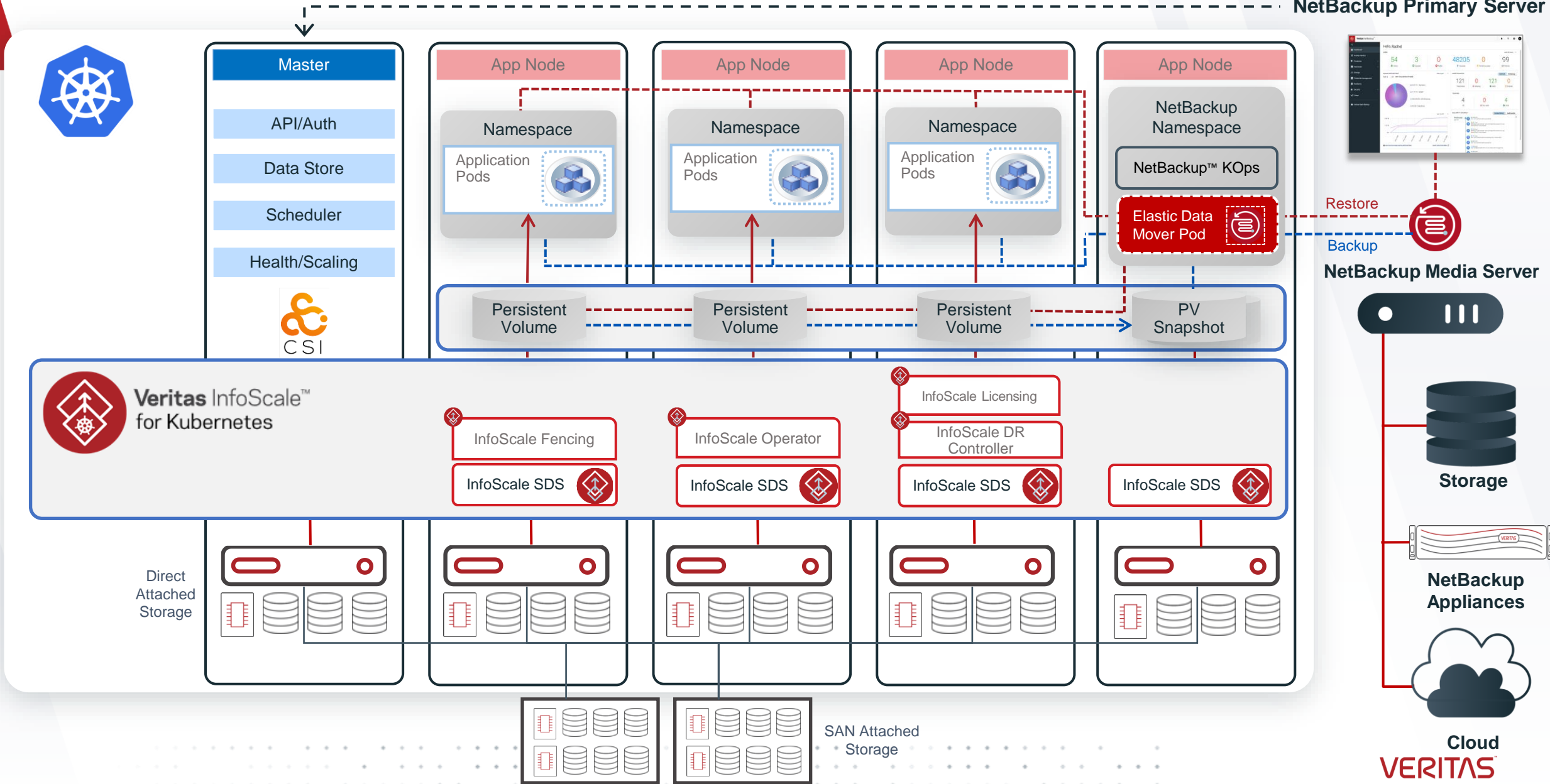


Cloud

VERITAS

Data Protection for Kubernetes Architecture with InfoScale

NetBackup Primary Server



Summary



Enterprise Resiliency for Containerized workloads

Resiliency

- **Automated or manual Disaster Recovery (DR)** capabilities to protect against cluster or site failure
- Detect and recover faster from node level events for Stateful applications

Mobility

- Data replication and volume snapshots enable mobility of application data across clusters
- Freedom from storage or K8s distribution (on-prem or cloud) lock in

Efficiency

- High performance parallel access to persistent enterprise storage
- True SDS layer for DAS/SAN storage



Veritas InfoScale for Kubernetes
More detail - [At-a-Glance doc](#)



ChatGPT

While I can't provide a direct quote from Albert Einstein about Veritas InfoScale, I can imagine he might appreciate the concept of organized and reliable information management. Einstein valued order and efficiency, and if InfoScale aligns with principles of structured and efficient data handling, he might express approval for its role in streamlining information and promoting system reliability. However, it's important to note that this is a speculative interpretation based on Einstein's known perspectives on organization and efficiency.

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Thank you