

The Nutanix logo, consisting of the word "NUTANIX" in a bold, white, sans-serif font, with a small "TM" trademark symbol to the right. The logo is centered horizontally and positioned above the main title. The background features a blue gradient with large, semi-transparent, light blue geometric shapes that form a stylized 'X' or 'N' pattern.

NUTANIX™

Cloud Native & Containers with Red Hat & Nutanix

Challenges Of Building And Running Modern, Containerized Applications

Enterprises' app development outpaces IT's ability to support it

Developers will resort to shadow IT and use public cloud resources when their work is held up by lack of access to resources and services

Kubernetes is deep and complex, and evolves fast with its growing ecosystem of technologies

Many organizations don't have in-house expertise and can't keep up with new functionality

Legacy infrastructure isn't built to handle Kubernetes

Kubernetes is a distributed system, requiring compute, storage, and networking that adapts to the way it operates.



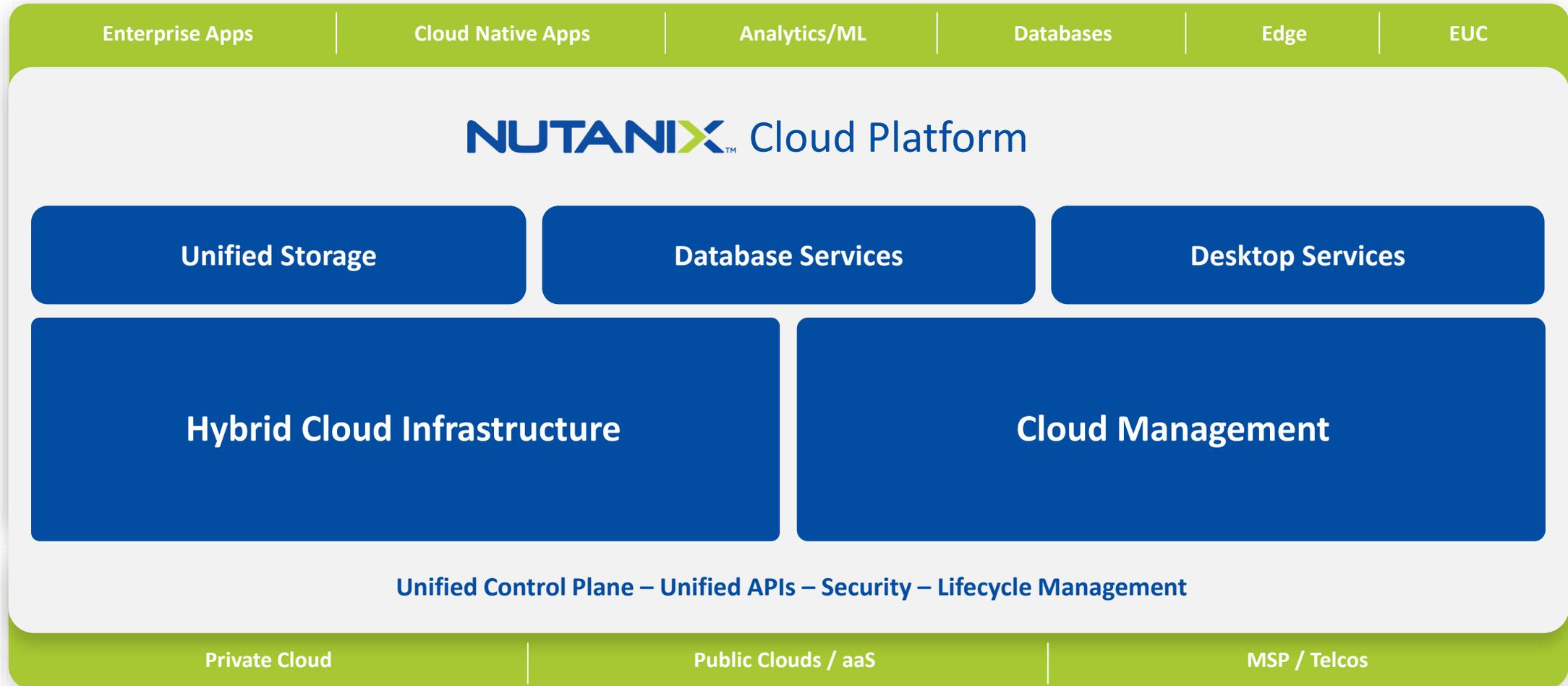


Our Cloud-Native Mission

Deliver the best infrastructure to run cloud native workloads at scale using any Kubernetes distribution



Nutanix: One Platform for Hybrid Multicloud



One platform for Kubernetes and Containers



NKE



OPENSIFT

NUTANIXTM
Cloud Platform

DELLEMC


Hewlett Packard
Enterprise

Lenovo

...

aws


 Microsoft
Azure

Cloud Native is Better on Nutanix

Scalable Infrastructure



Kubernetes Clusters
Worker Node Pools
HCI Infrastructure Scale

Invisible Infrastructure



Infrastructure Security
Kubernetes, Virtualization
Seamless Lifecycle Ops

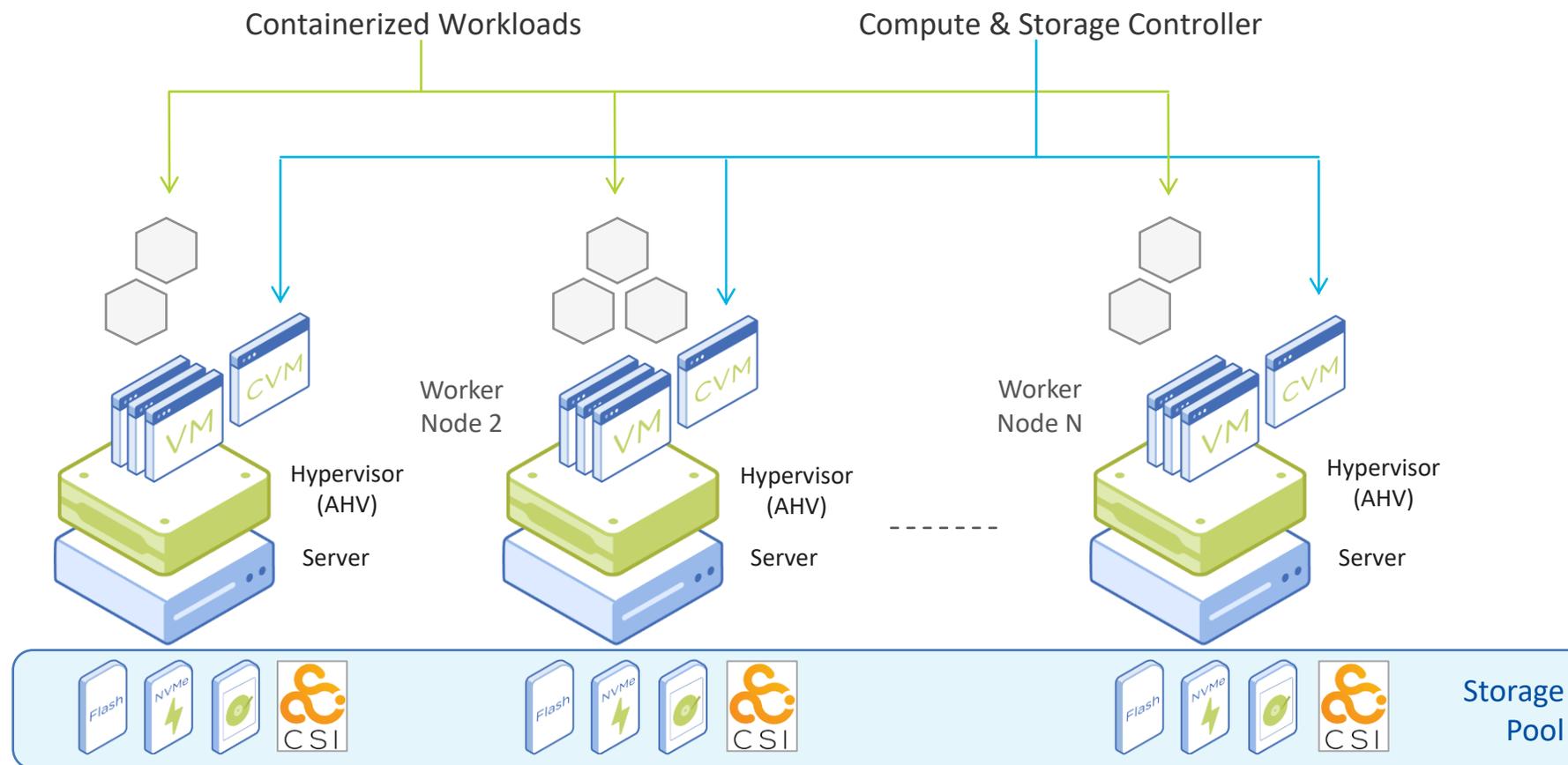
Built-In Data Services



Volumes, Files, Objects
Database as a Service
Certified CSI Drivers



Flexible Scale-out Architecture

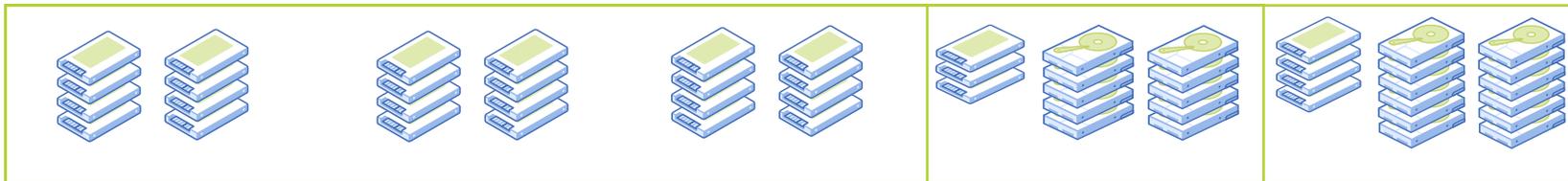
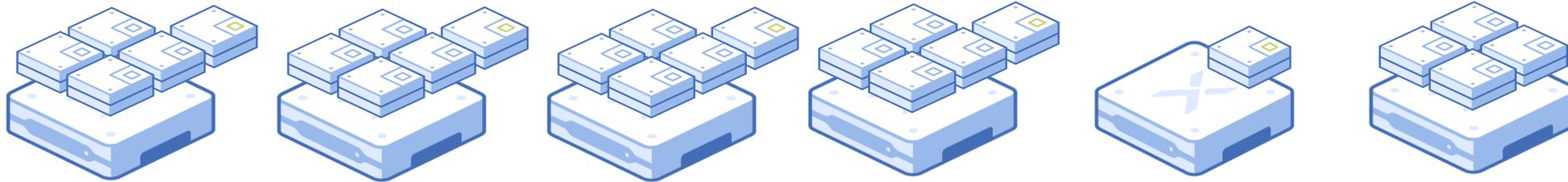
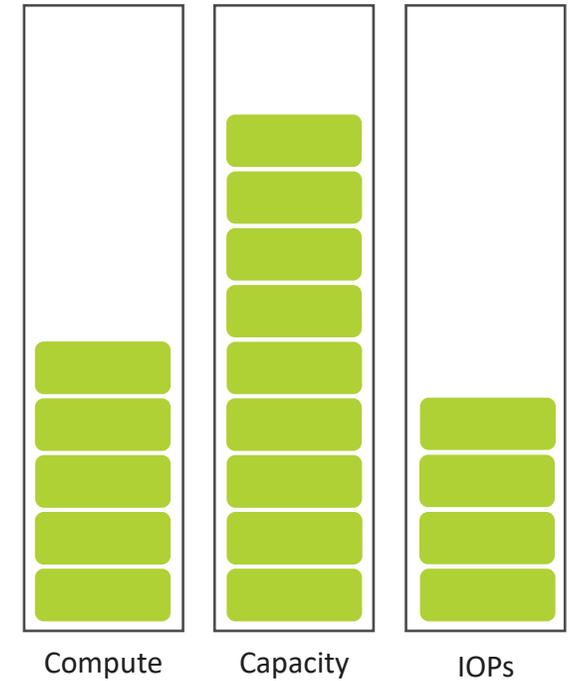


- ✓ Start small and scale without limits
- ✓ Increase capacity one node at a time
- ✓ Keep data local for maximum performance
- ✓ Mix node types and hardware generations



Flexible Scaling with HCI

- Performance and capacity scale linearly
- Scale compute and storage independently
- Mix & Match node types
- Data automatically rebalanced



Storage Heavy

Storage Only

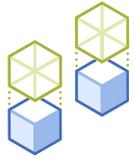
Compute Only



Predictable Performance when Scaling



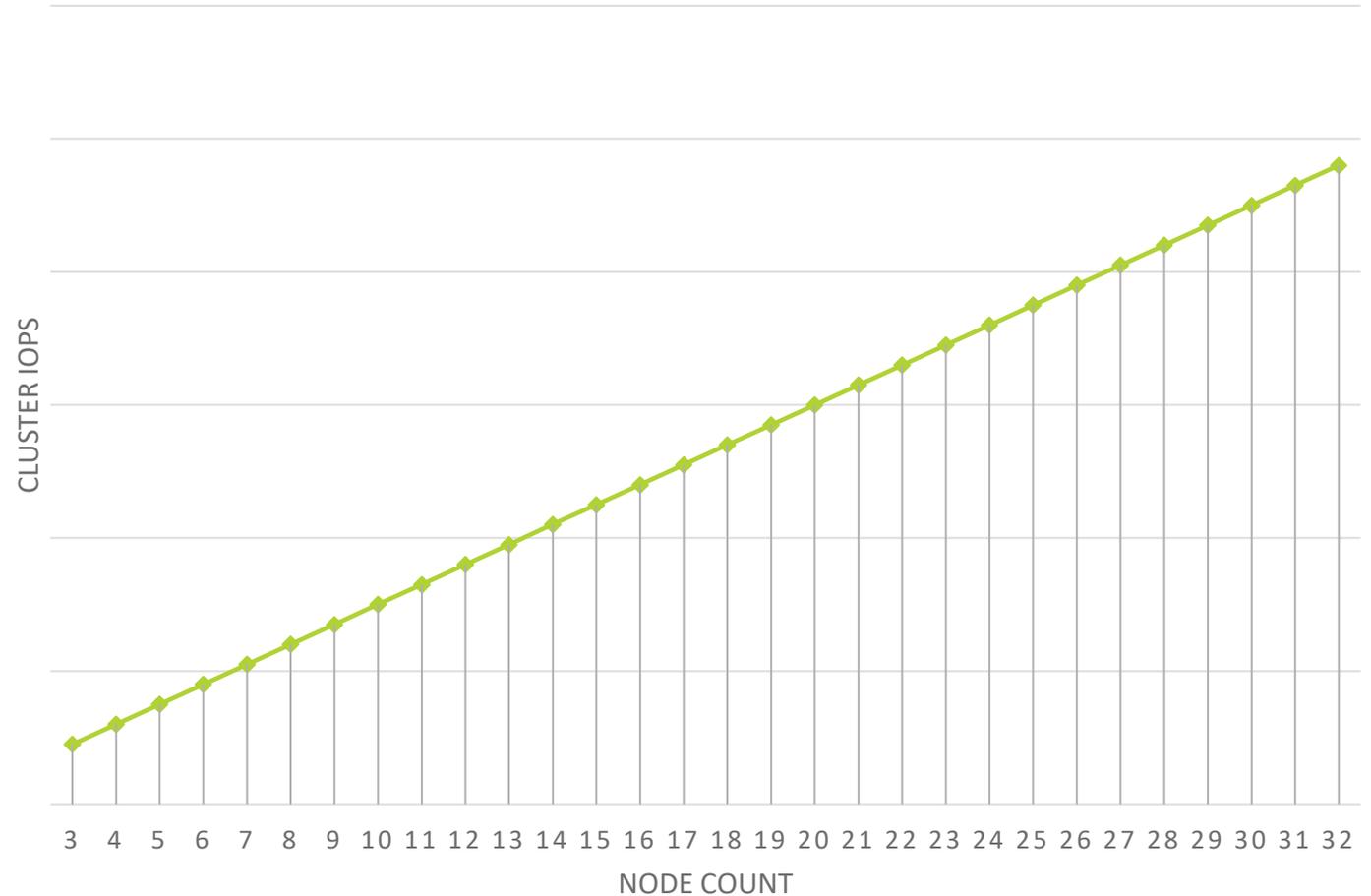
Consistent performance per node



Data Locality minimizes impact of other workloads in the cluster



No penalty for large clusters



Cloud Native is Better on Nutanix

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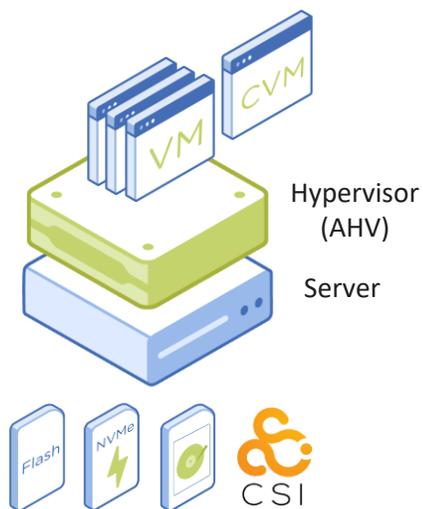
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HCI Is Superior To Bare Metal For Containers

RESOURCE UTILIZATION

- HCI takes full advantage of powerful CPU scheduling features
- HCI offers superior consolidation over bare metal
- HCI storage fabric optimizes performance and capacity as you scale



Nutanix HCI

RESILIENCE

- HCI minimizes cluster downtime

MANAGEMENT AND USER EXPERIENCE

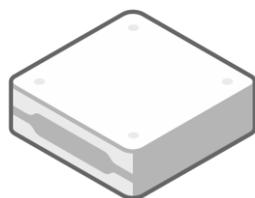
- HCI automates firmware management
- HCI enables simple management of multiple Kubernetes clusters running on the same hardware

STORAGE AND DATA SERVICES

- HCI simplifies persistent storage configuration and management for stateful containers

SECURITY

- HCI is more secure as a result of multi-tenant isolation



Bare Metal Server



LCM: One-Click Infrastructure Upgrades



Easy to Use

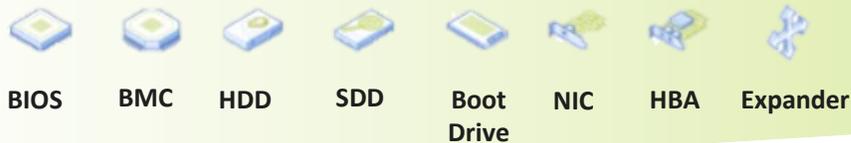


Removes Complexity



Scalable

Software->Firmware Full Stack Upgrades



Unified Upgrade Process



AOS



AHV



Prism



Files



Objects



Calm



Foundation

Automatic Dependency Management

NUTANIX

Hewlett Packard
Enterprise

DELL EMC

Lenovo

inspur

FUJITSU

intel

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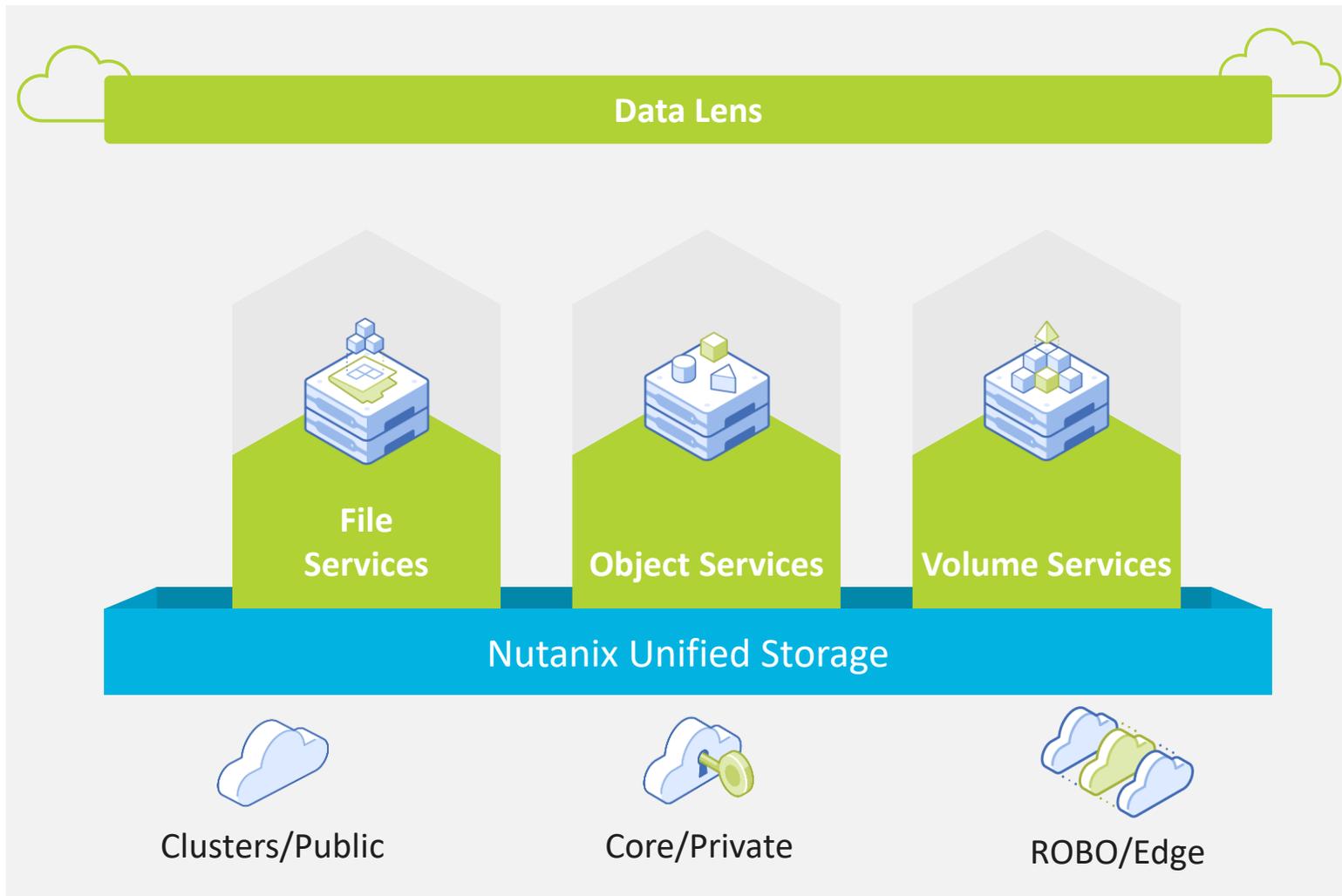
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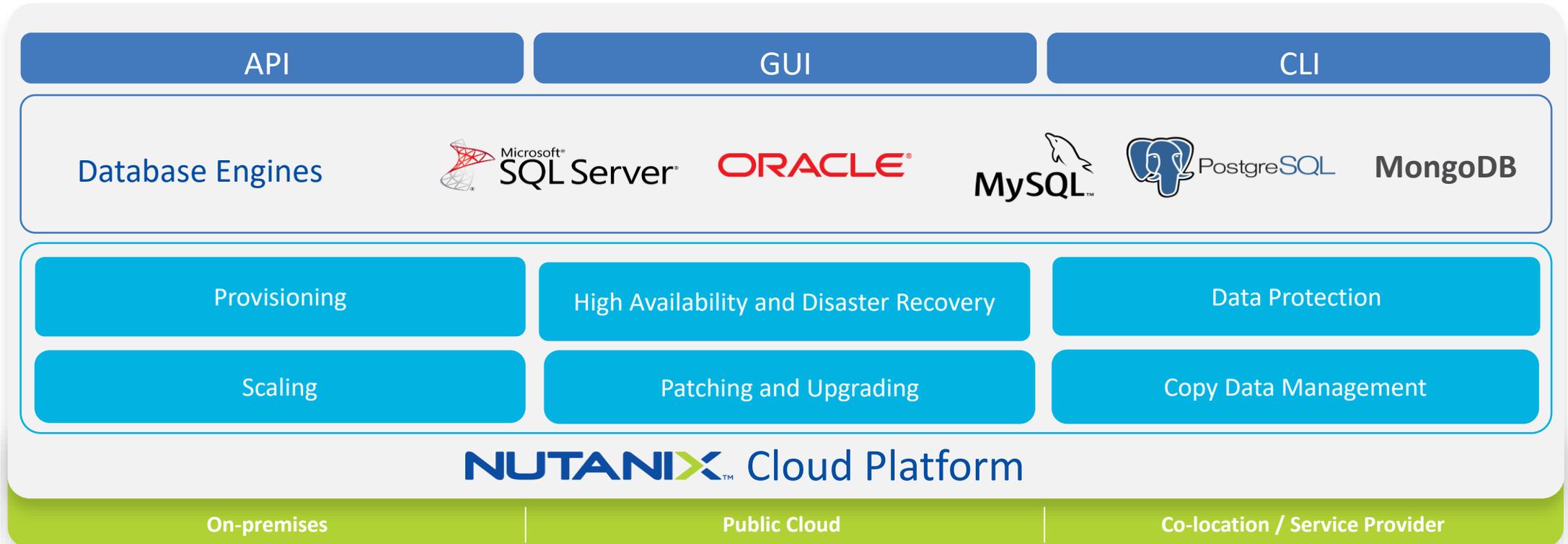
Unified Storage For A Cloud Native World



- Unified Data Platform
- Full-featured CSI
- Security-First Design
- Web-scale Architecture
- Flexible Consumption



Nutanix NDB – Hybrid Multicloud DBaaS

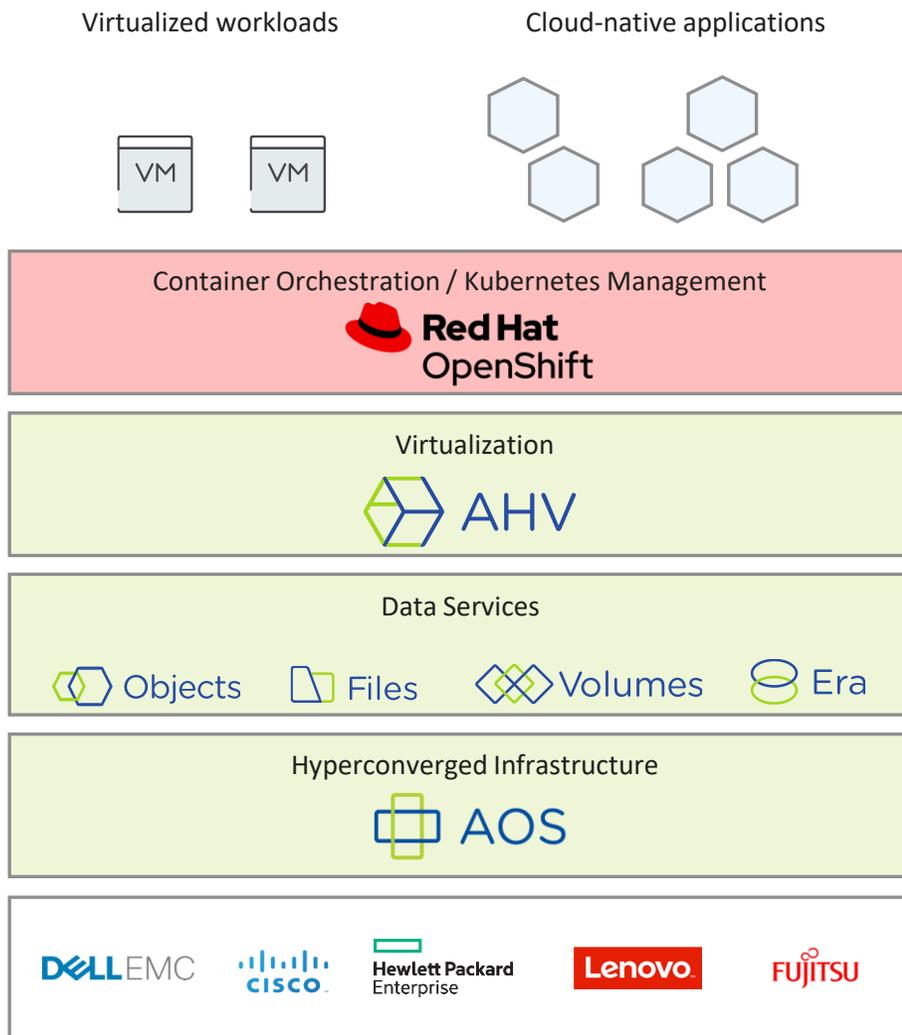


- ✓ Automated management of 100s of databases on hybrid multicloud
- ✓ Meet security, HA, disaster recovery, performance, scale, and cost requirements
- ✓ Enable developers to self-service their database needs
- ✓ Enable DBAs to focus on the organizations most critical databases



Conclusion

Build An Enterprise K8s Stack With Nutanix & Red Hat



- **Best Infrastructure for K8S**

- Nutanix HCI is architected for Kubernetes and distributed environments (scalable, resilient)
- Integrated storage solutions, automation, and more
- Supports VMs and containers in the same environment
- Integrates with key public cloud platforms and cloud native technologies via strategic partnerships

- **Benchmark for operational simplicity**

- Deploys rapidly & reliably
- Offers an intuitive, public cloud-like user experience
- Full stack support from a single leading vendor

- **Accelerates app development**

- Easily meet developers' needs for IT resources and services



NUTANIX.
Test Drive Private Cloud.

TRY FOR FREE

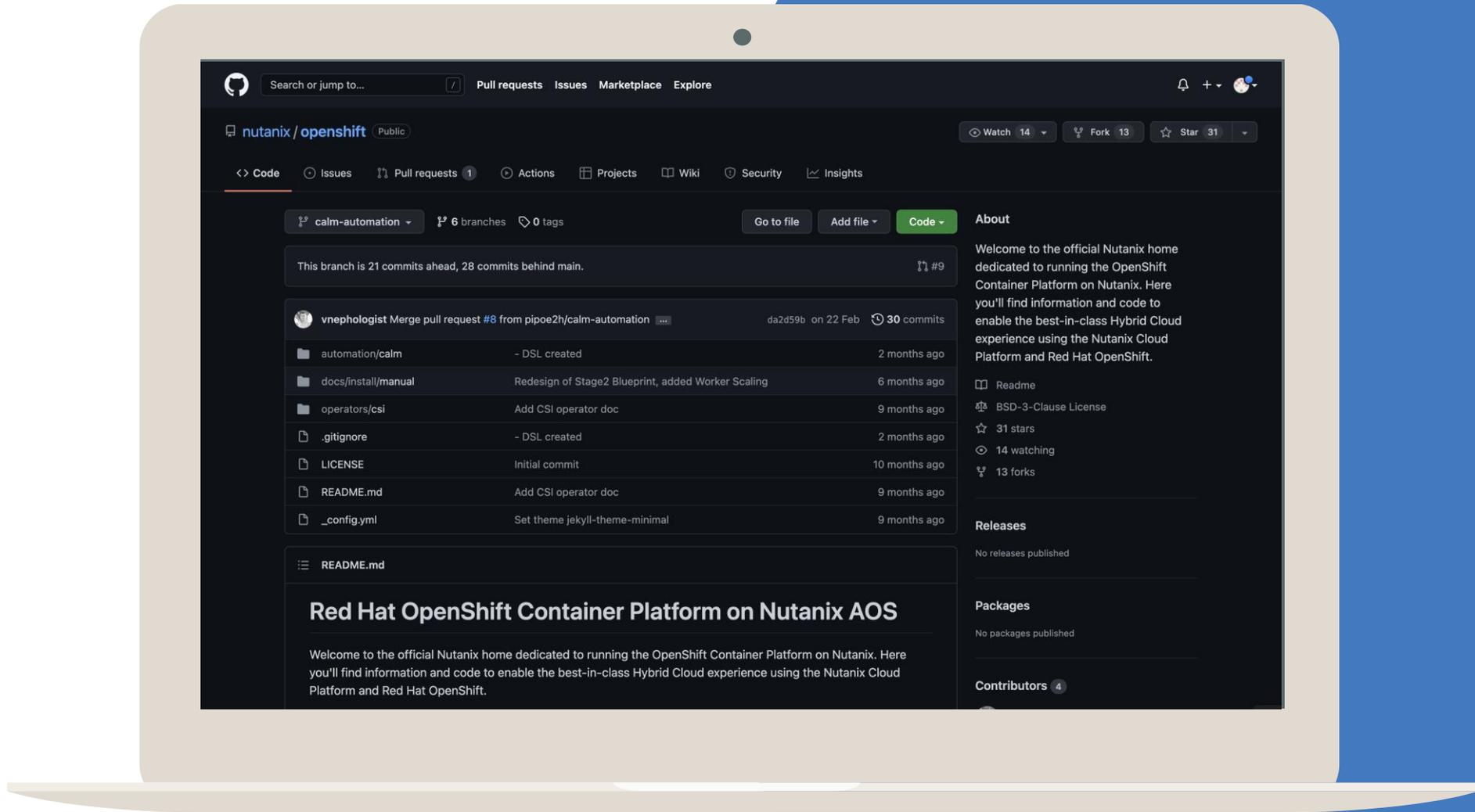


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Deploying Red Hat OpenShift on Nutanix AHV

By Jose Gomez February 25, 2022 7:00 am



<https://github.com/nutanix/openshift/tree/calm-automation>

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