The Future of Datacenters requires Automatized Modern IT & Edge Architecture

Gaining control of your data with efficient, flexible, and future-ready solutions

Luigi De Meo

Presales Principal Solutions Architect

November 12nd, 2025

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What's top of mind for your CIO is top of mind for us

Customers are prioritizing three strategic initiatives for their storage environments.

Modern DC, Edge and Multicloud

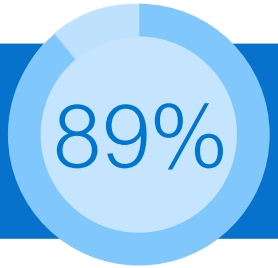
91% Face challenges building a multicloud strategy to support innovation[1]

Artificial Intelligence and Generative AI

75% say AI/GenAI is a key part of their organization's business strategy[2]

Cybersecurity and data resilience

89% say security is a key part of their organization's business strategy[2]



89% of organizations say usage/evaluation of multiple hypervisor options is a strategic imperative[3]

Which requires a strategic partner to move forward

1 Innovation Catalysts, Dell Technologies, February 2024
2 Source: Dell Technologies survey across 750 business and IT decision makers across US, UK, DE, FR and JP, all segments, Feb 2025.
3 Source: Enterprise Strategy Group Complete Survey Results, Navigating the Cloud and AI Revolution: The State of Enterprise Storage and HCI, February 2024.

Red Hat intel. DELL Technologies

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What we're hearing from customers

Top requests

"I can't easily ***repurpose my environment*** for new software without buying new hardware."

"Working with multiple vendors for my hardware is ***way too complex***, and we never know who to call for what support issues"

"My staff doesn't have the ***skill set*** yet to transition software provides without impacting operations."

"We need a way to be ***cost efficient*** while still preparing for the future."

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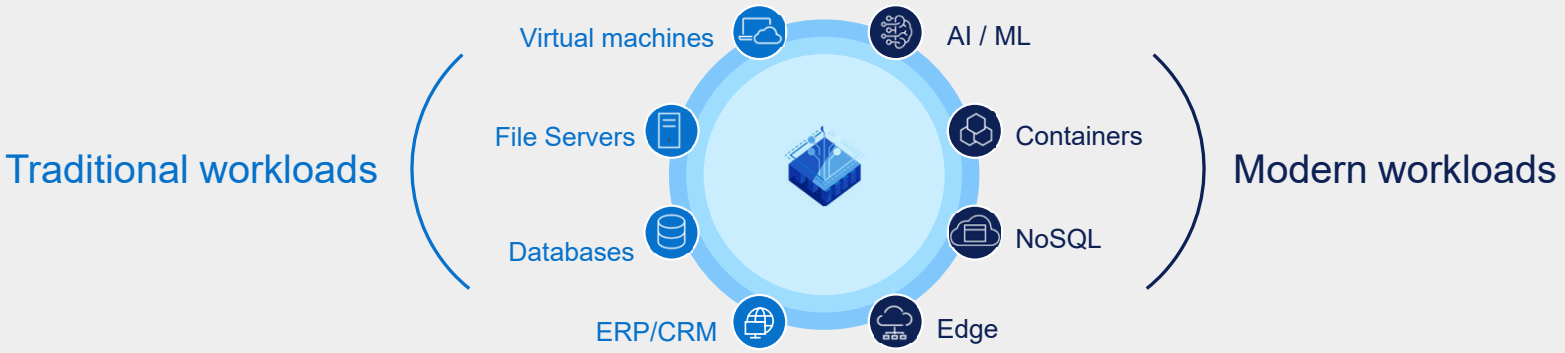
Take a disaggregated approach to support evolving workload mix



3-Tier
Flexible

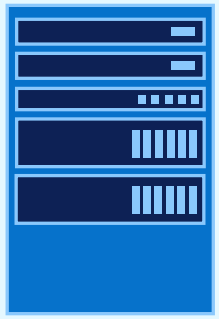
- Compute
- Networking
- Storage

Disaggregated & Dell Private Cloud
Simple and Flexible

- Disaggregated Infrastructure
  PowerEdge, PowerStore, Network & PowerProtect[1]
- Hypervisor Freedom
  Choose & Change Software
- Highly Efficient, Low Cost
  7:1 Server Reduce & 5:1 Storage DRR

- Single Management Console
  Manage Compute, Network, Storage like HCI
- Automated Operations & LCM
  Simplify Deploying Resources & Upgrades like HCI
- Single Vendor Support
  With faster time to issue resolution like HCI

Hyperconverged
Simple



Disaggregated + Dell Private Cloud:
The best of Both options

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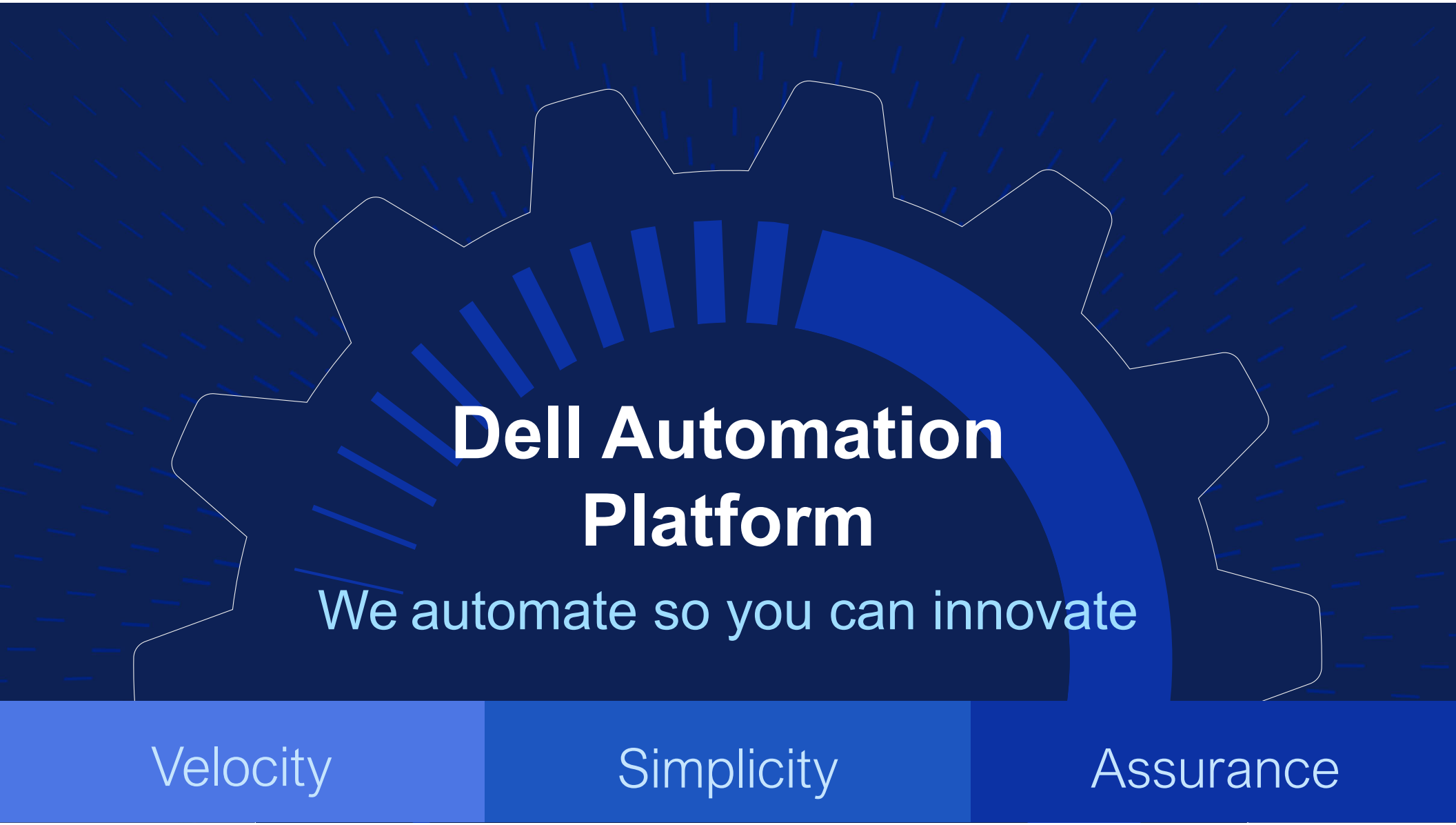
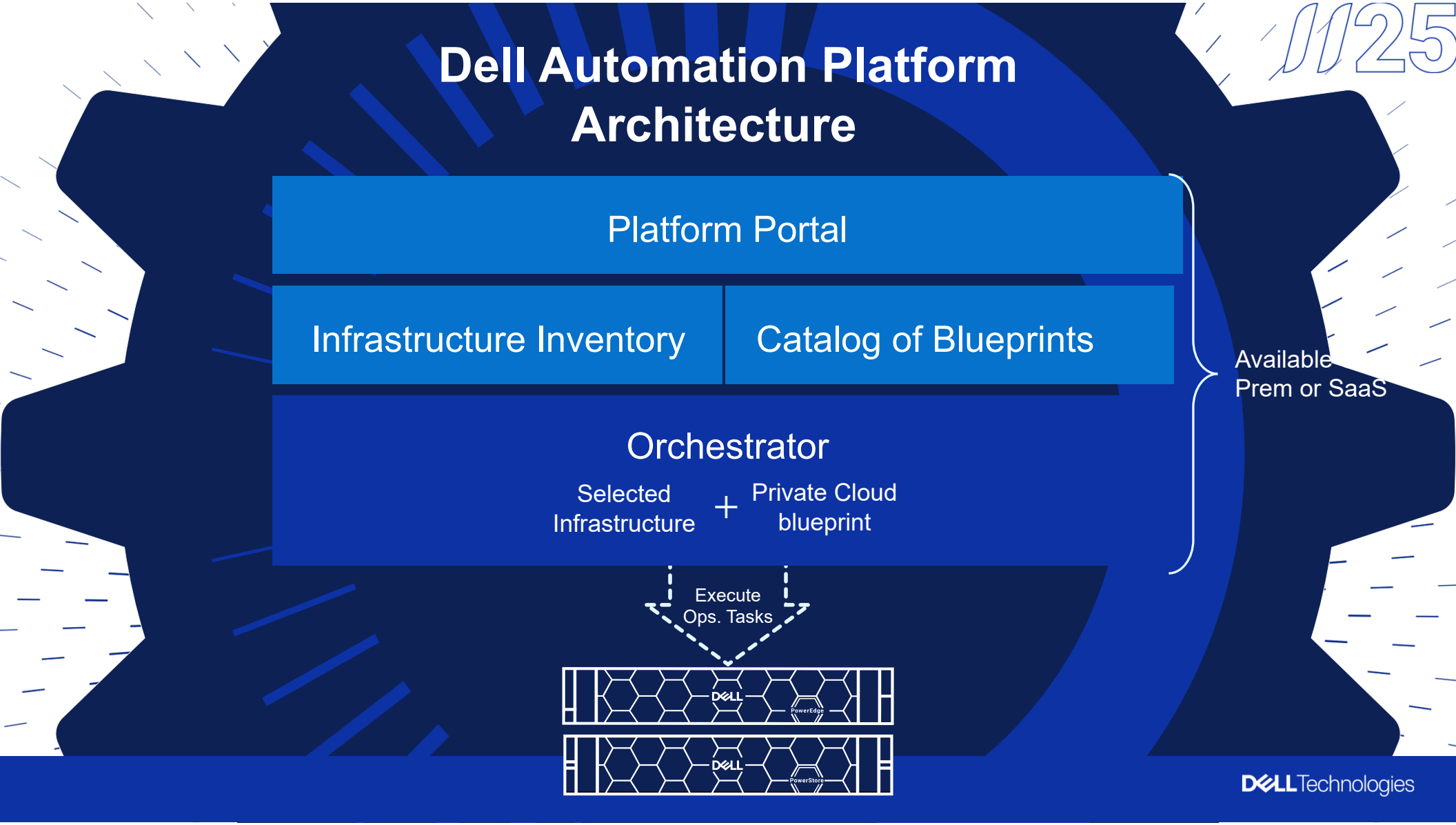
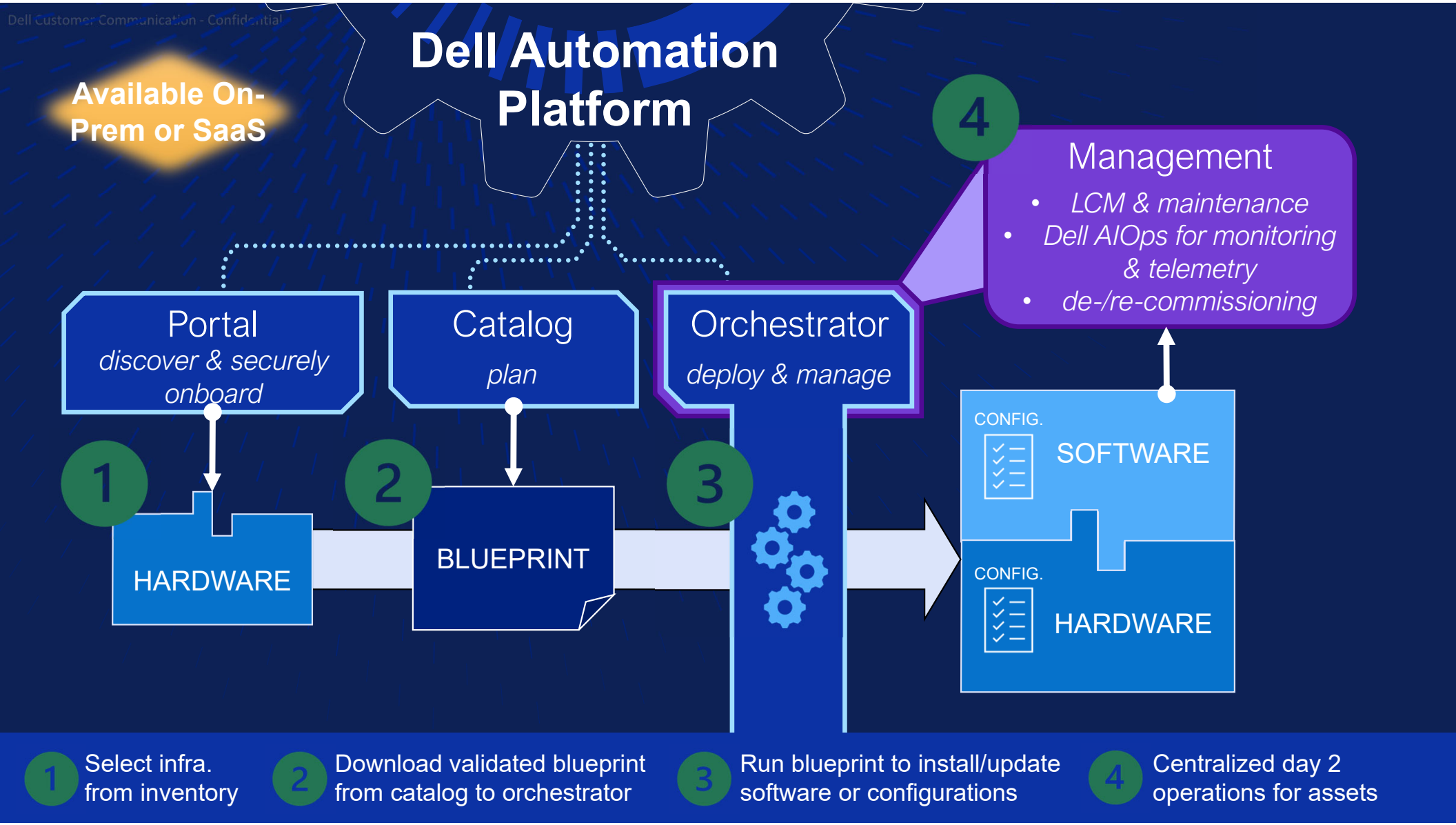

Dell Automation Platform
We automate so you can innovate
Velocity
Simplicity
Assurance

Dell Automation Platform Architecture



Dell Customer Communication - Confidential



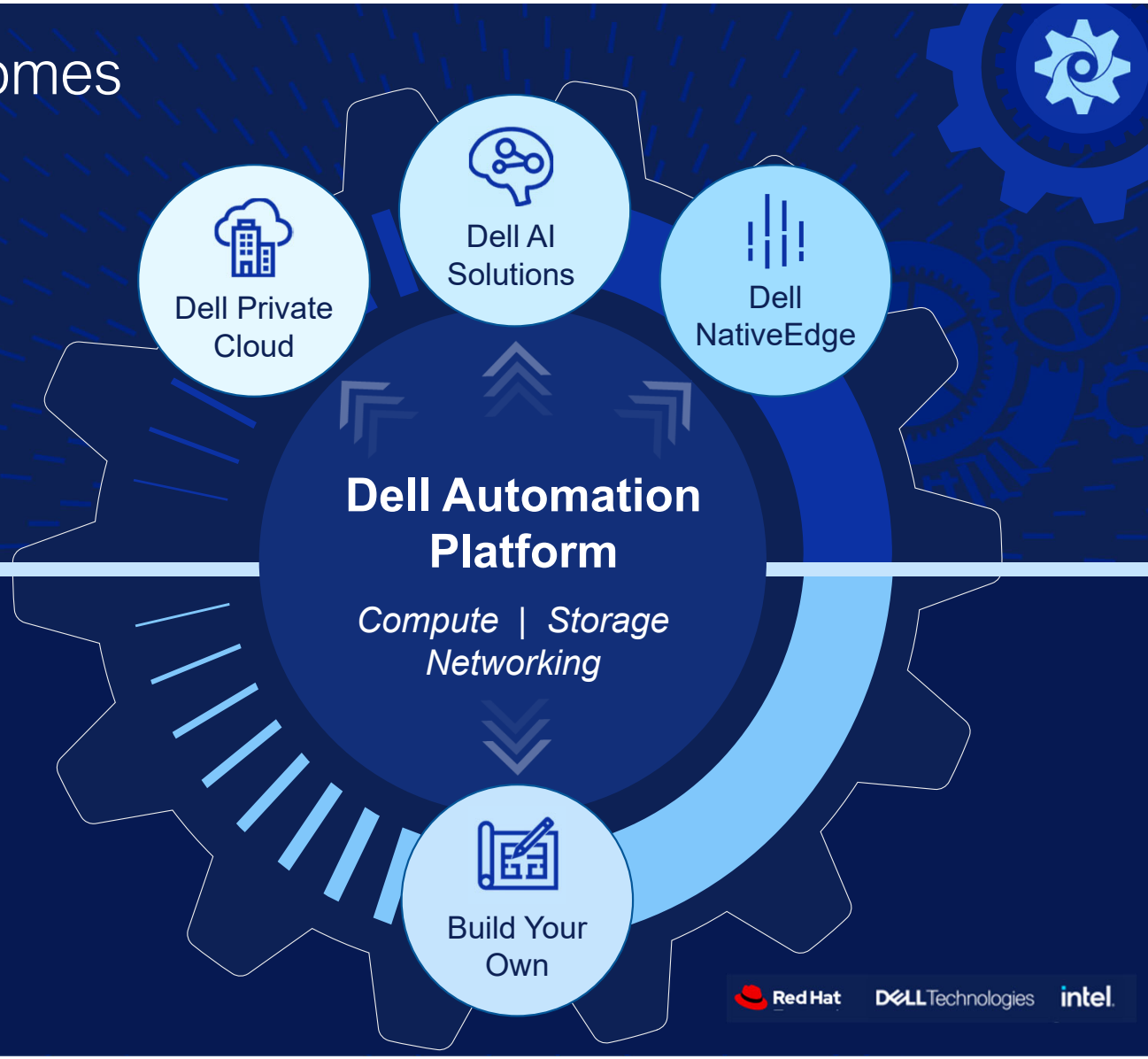
Enabling you across outcomes

Curated and Validated

Deploy and manage outcomes on your Dell infrastructure, tested and validated by Dell's experts

Customizable and Flexible

Build on validated blueprints or start from scratch using open source tools and software on orchestrated infrastructure



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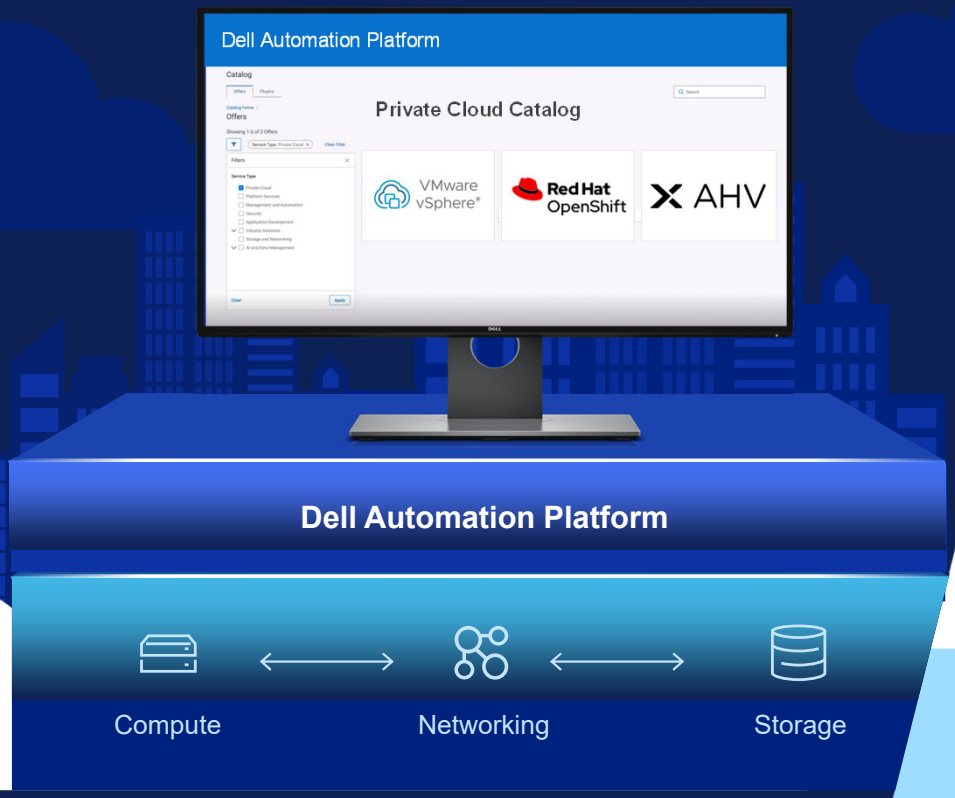
Introducing Dell Private Cloud

Freedom and flexibility to evolve on your terms



Fully transferable and reusable hardware

Dell Private Cloud

- Protect investments with disaggregated and adaptable infrastructure
- Bring your own cloud OS licenses for ultimate flexibility
- Simplify operations with full lifecycle management and automated integration with Dell PowerStore (additional storage H2 2026)
- Ensure continuity by leveraging existing skills and access to familiar tools
- Rely on Dell as the primary source of system-level support for hardware and system software

Validated with

55,000+

hours of testing[1]

Over

90%

fewer steps to provision vs. manual deployment[2]

Workload-ready clusters in

2.5

hours, **zero** manual effort[3]

[1] Based on internal Dell testing. Dell Private Cloud deploying VMware vSphere and Red Hat. August 2025. Actual results may vary. CLM-014261.
[2] Based on internal Dell testing. Manual steps automated through a single Dell Private Cloud blueprint. May 2025. Actual results may vary. CLM-014260.
[3] Based on internal Dell testing. After hardware installation, configuration and platform onboarding. No manual interaction required after initiation. Actual results may vary. CLM-014262.
4 Additional storage support coming 2H 2025.

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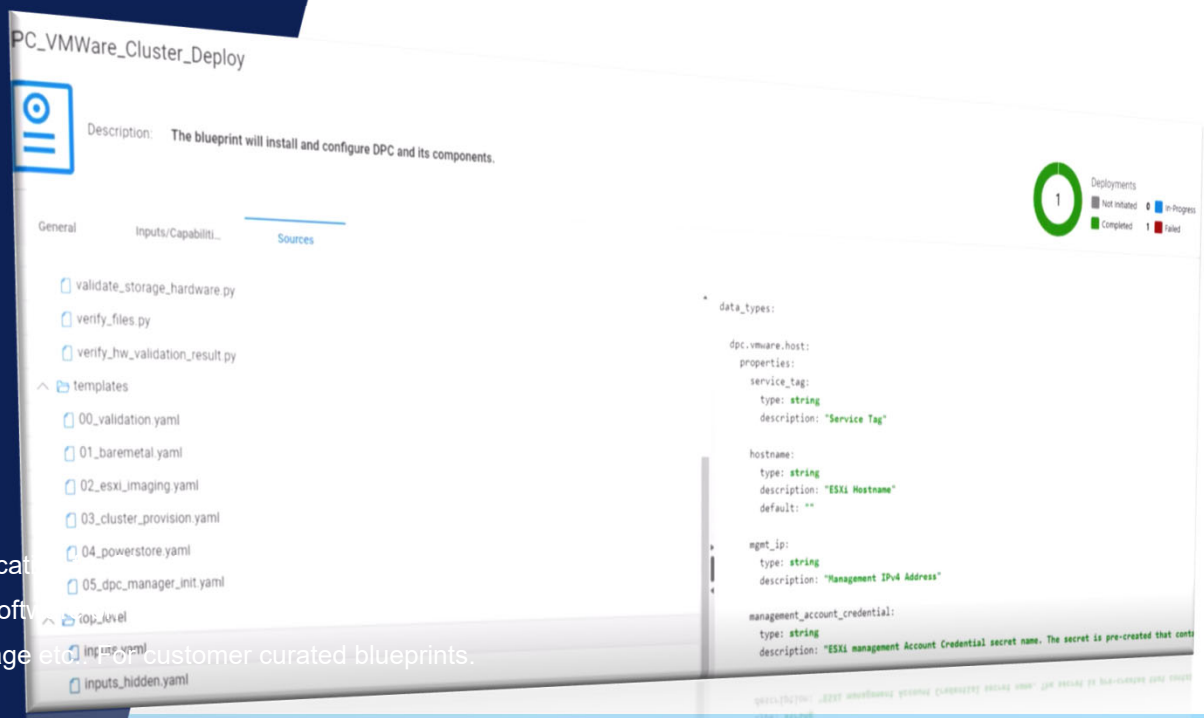
What is a blueprint?

A build scheme to perform complex IT infrastructure operations

- Defines resources and their connections between each other
- Declarative statements to execute configuration operation based on user-provided inputs
- Output is a sequence of steps that can be automated to complete a complex operation

Building a blueprint

- A YAML file written in Topology and Orchestration Specificat
- Dell tests and validates blueprints to support third-party soft
- Use third party IAC tooling I.E. Ansible/Terraform/Backstage etc. for customer curated blueprints.



VMware blueprints for Dell Private Cloud including:

- Cluster deploy
- Cluster expansion
- PowerStore update

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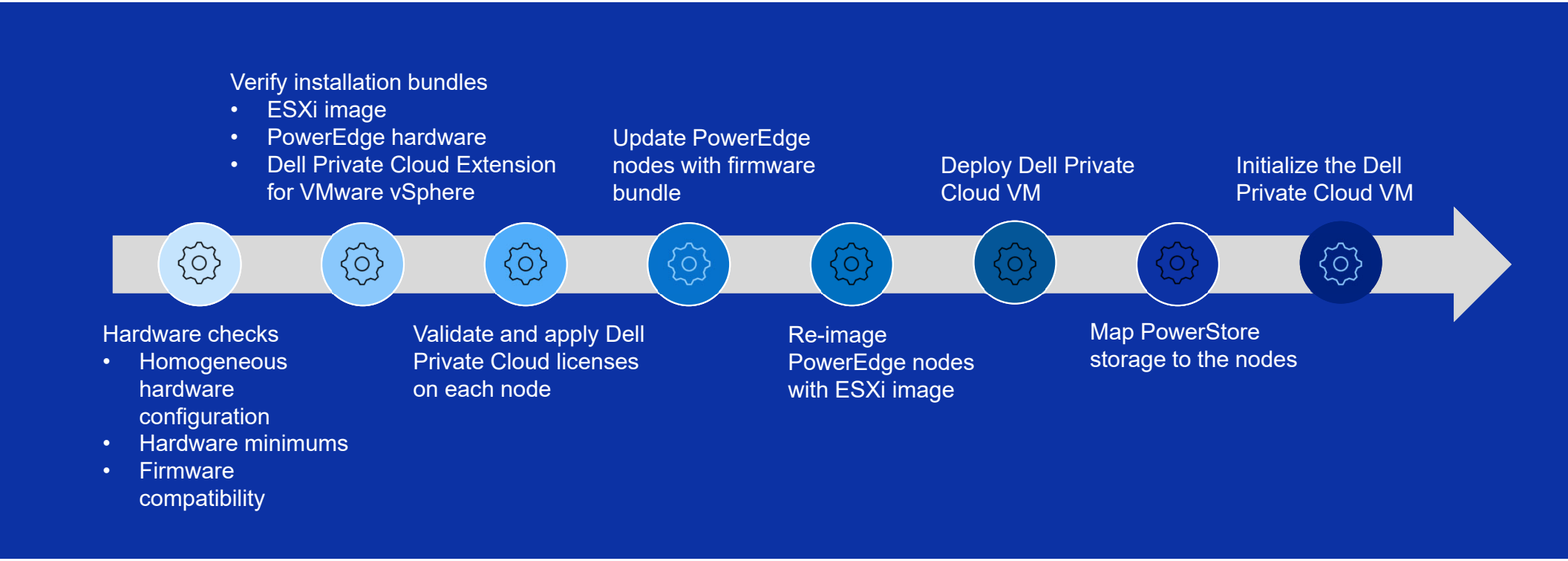
What the cluster deploy blueprint automates



Note: not all tasks are captured on this slide

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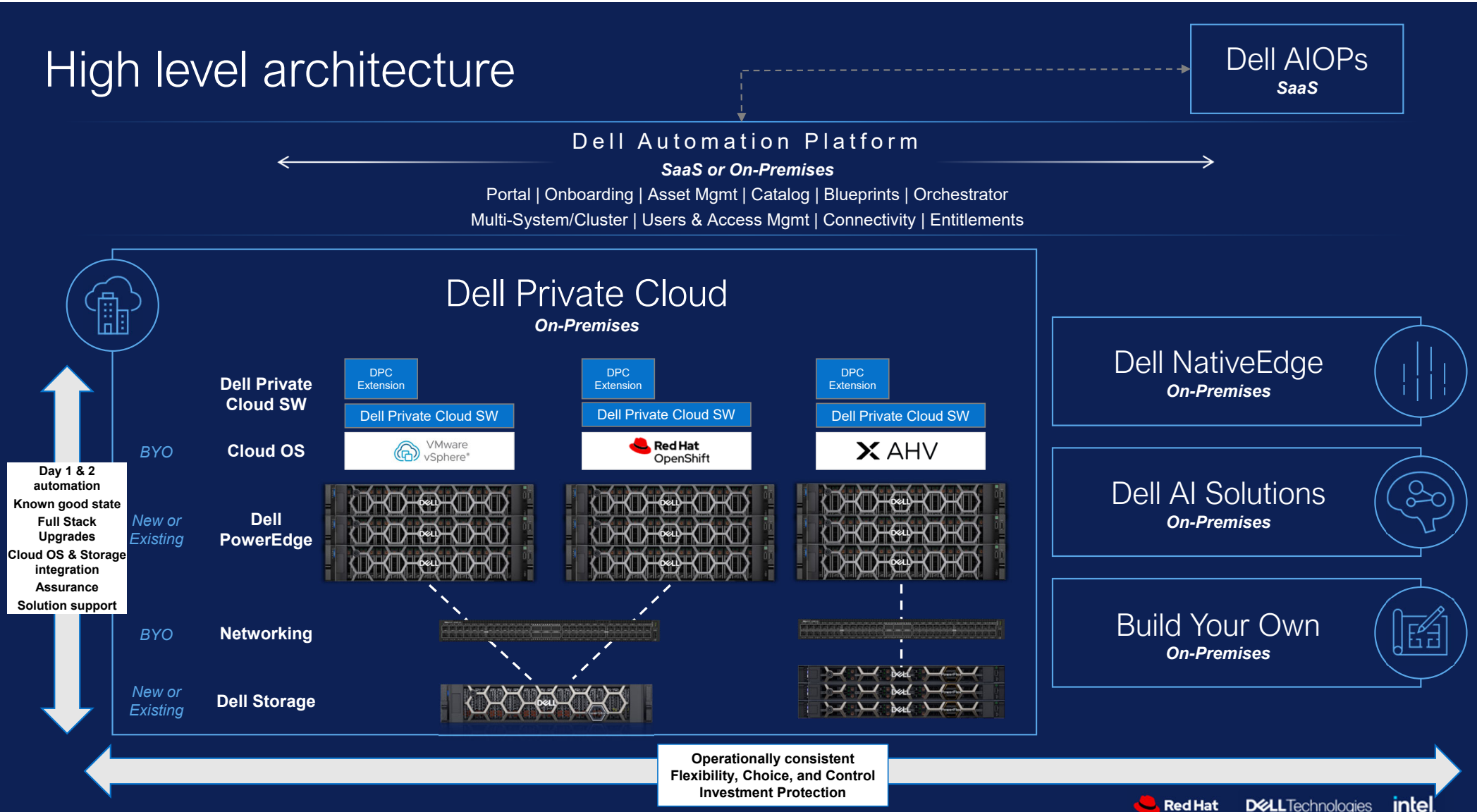
High level architecture



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Dell PowerEdge Powered by Intel Xeon

Purpose-built | Intelligent | Cyber resilient

XR-Series R-Series M-Series XE-Series T-Series

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Dell PowerStore

All-Flash Storage

Future-Proof

- ✓ Scale-up/Scale-out flexibility
- ✓ Built-in data resiliency
- ✓ Lifecycle Extension with ProSupport – “Never outgrow”

Efficient

- ✓ Industry-best 5:1 data reduction guarantee
- ✓ Autonomous active/active
- ✓ Energy efficient design

Easy to use

- ✓ Self-optimizing platform
- ✓ Powerful AIOps tools
- ✓ End-to-end ecosystem automations

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User Experience Example

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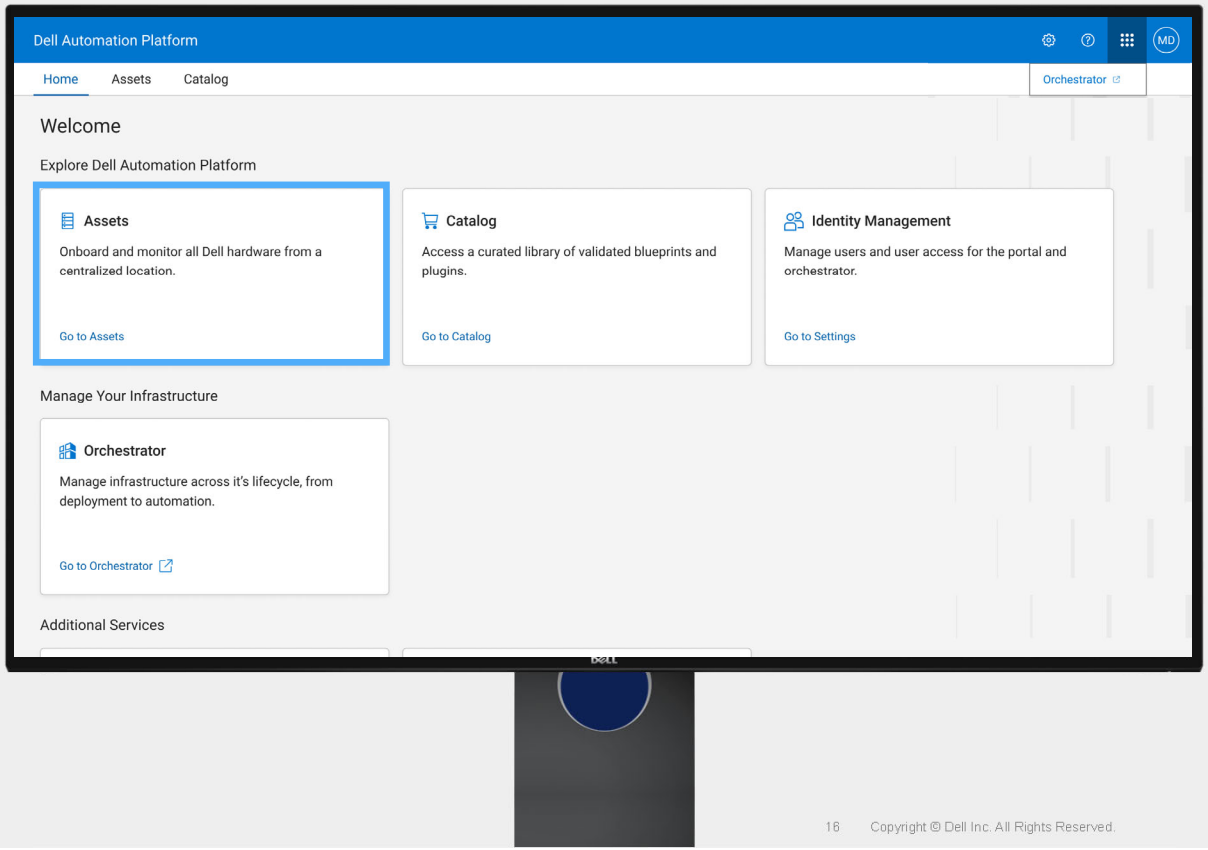
Central portal



Everything you need, all in one location

- Available via secure SaaS or a customer-hosted cluster on-premises
- Quick access to Dell Automation Platform services and capabilities
- Manage, monitor, and operate across cloud, on-premises, and edge

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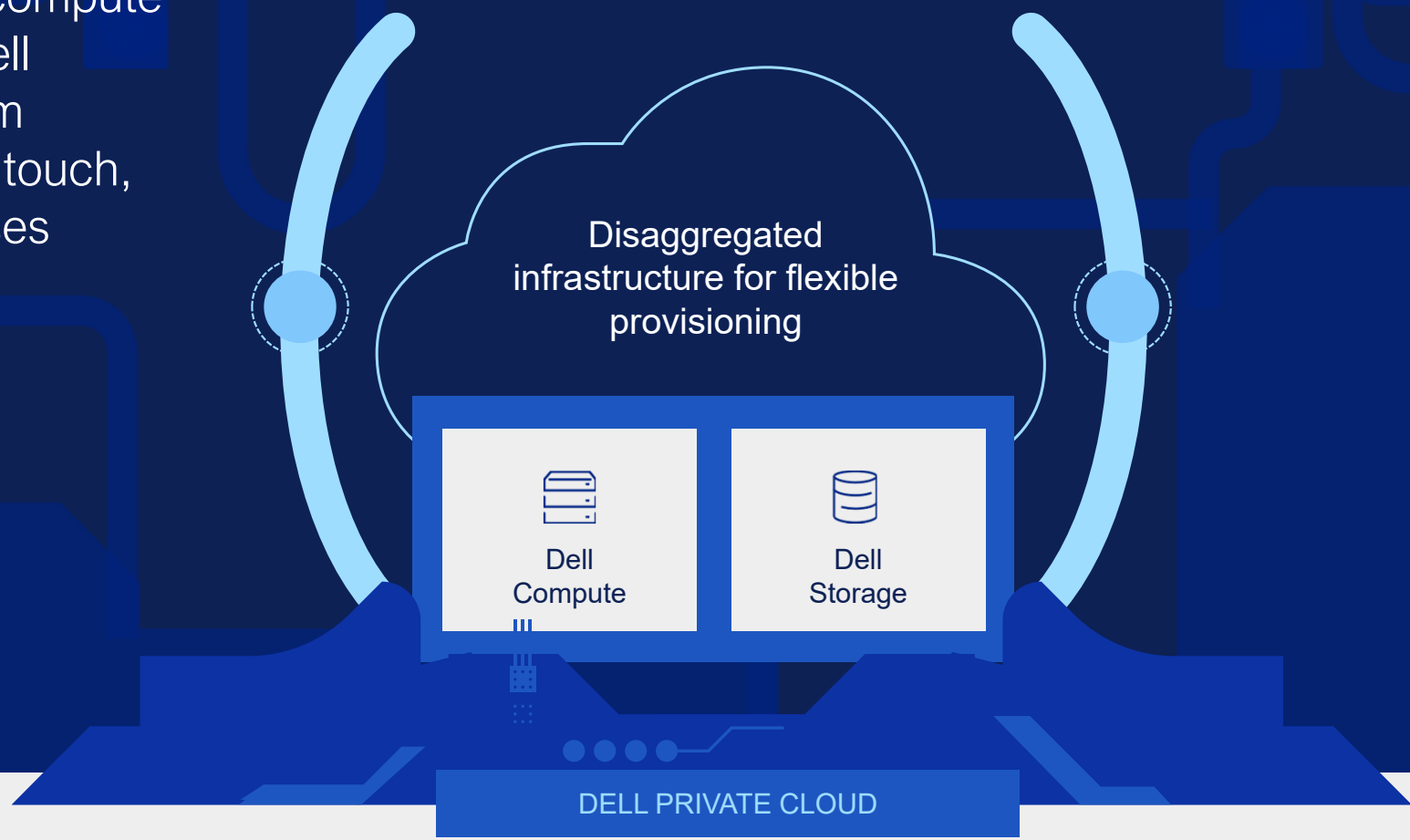
Securely onboard compute and storage into Dell Automation Platform inventory with zero touch, automated processes



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ONBOARD | PROVISION | MANAGE | DECOMMISSION | REPURPOSE

Day 1: Choose your preferred software from Dell's curated catalog of validated blueprints

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Dell Storage

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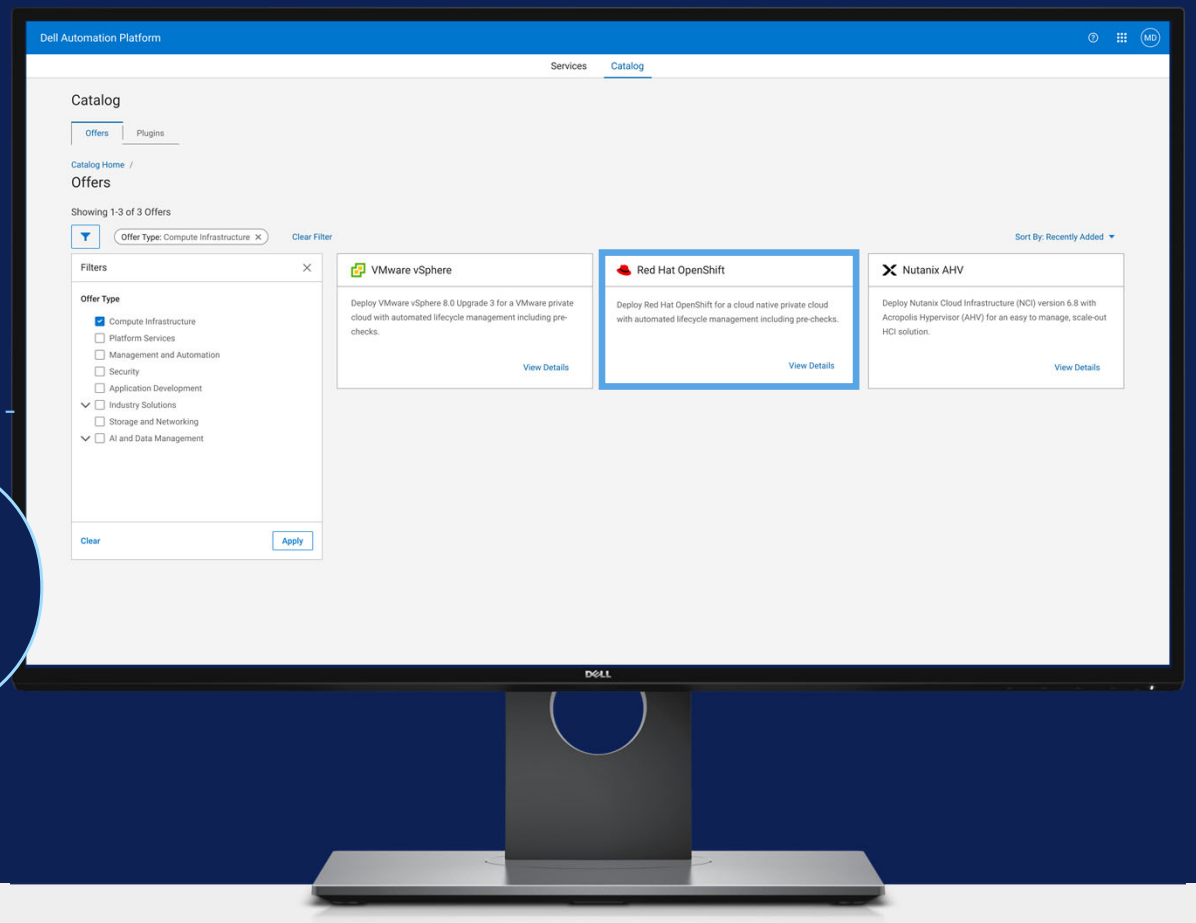

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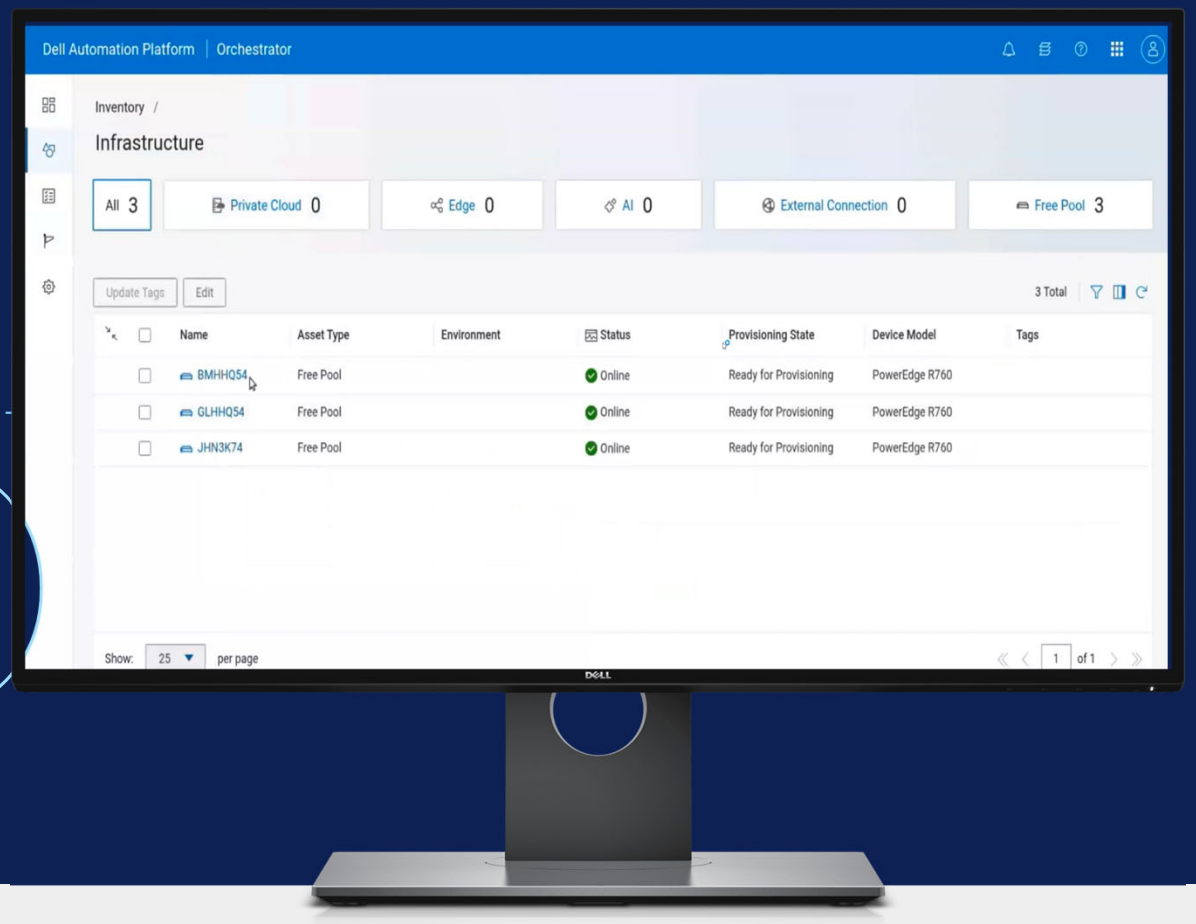
Step 2: Choose your available nodes from the pool



Red Hat

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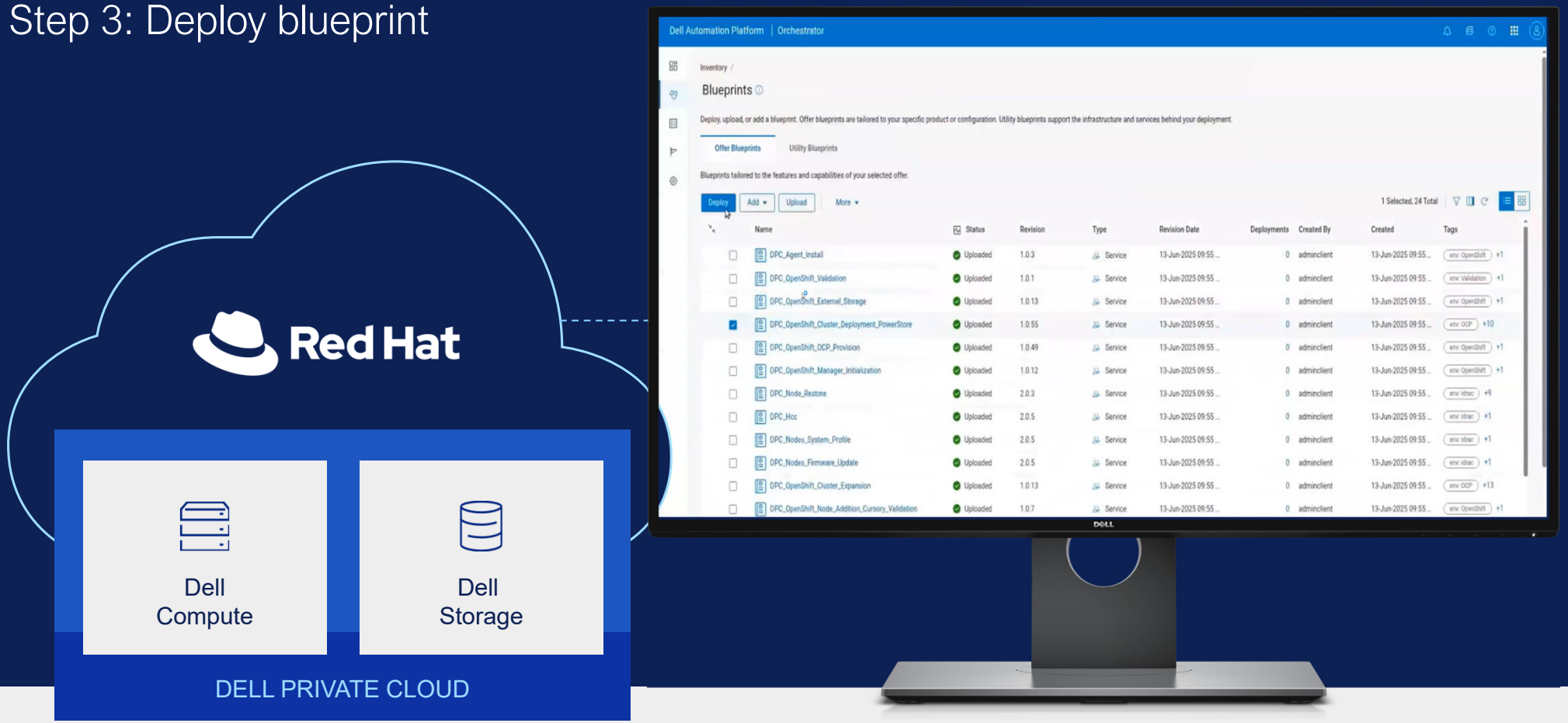
Step 3: Deploy blueprint



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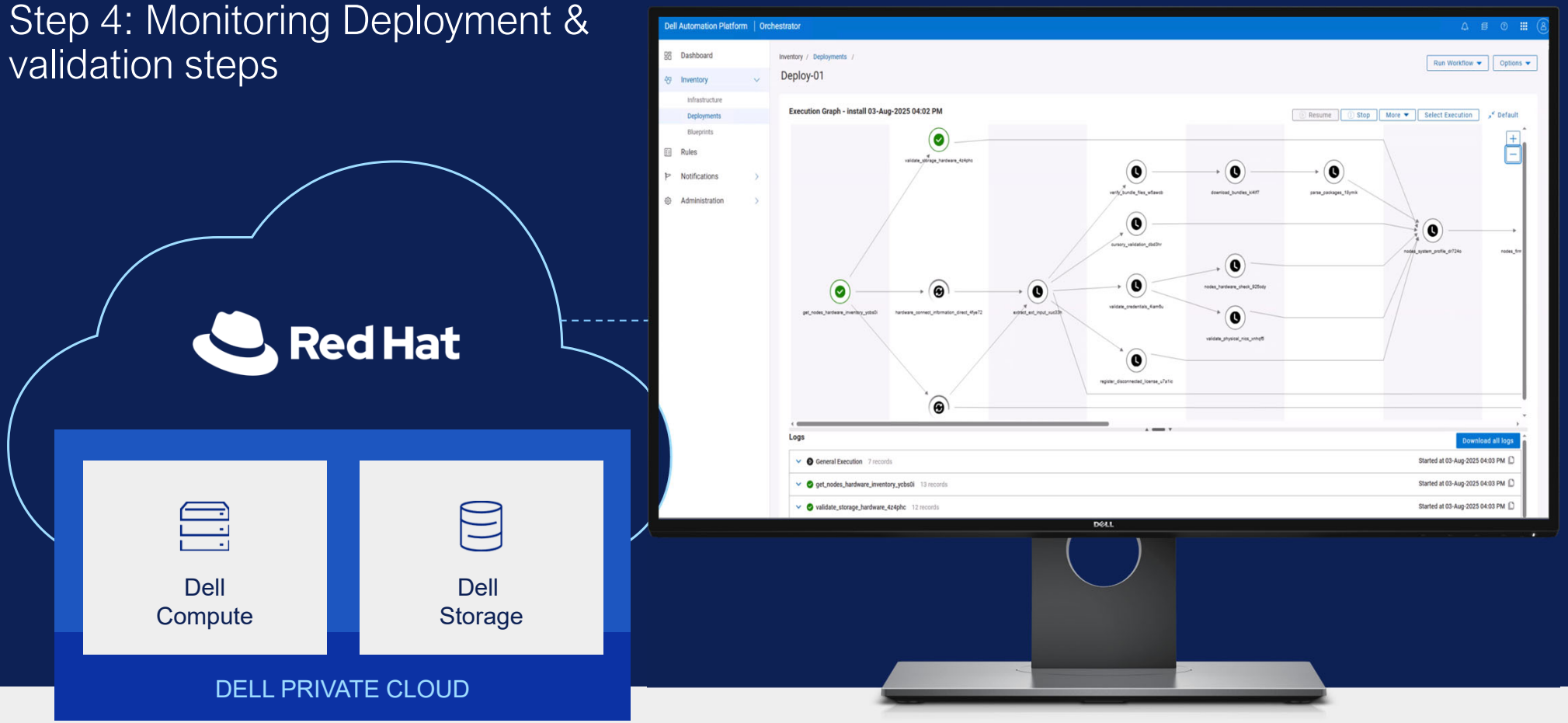
Step 4: Monitoring Deployment & validation steps



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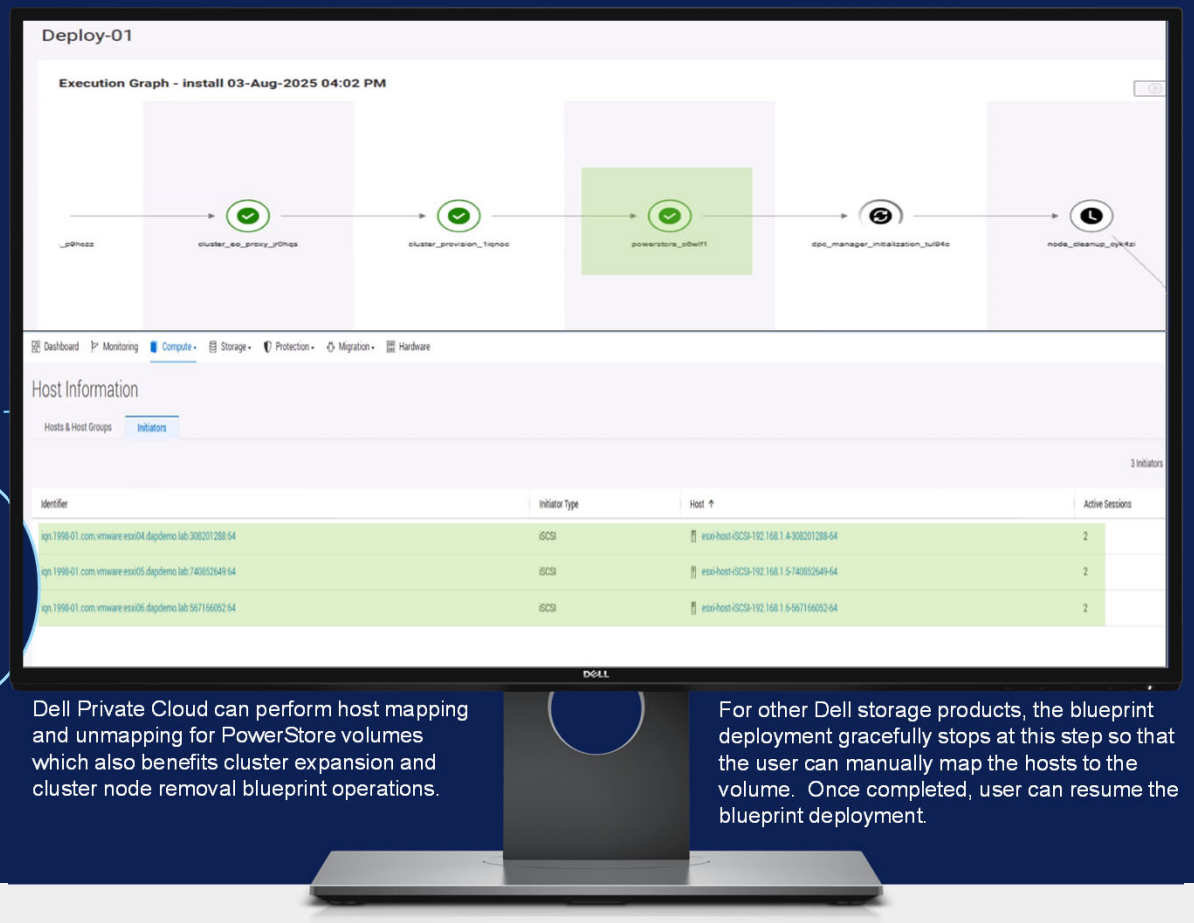
Step 4b: Host Mapping with Storage Integrated platform (PowerStore)



Dell Private Cloud can perform host mapping and unmapping for PowerStore volumes which also benefits cluster expansion and cluster node removal blueprint operations.

For other Dell storage products, the blueprint deployment gracefully stops at this step so that the user can manually map the hosts to the volume. Once completed, user can resume the blueprint deployment.

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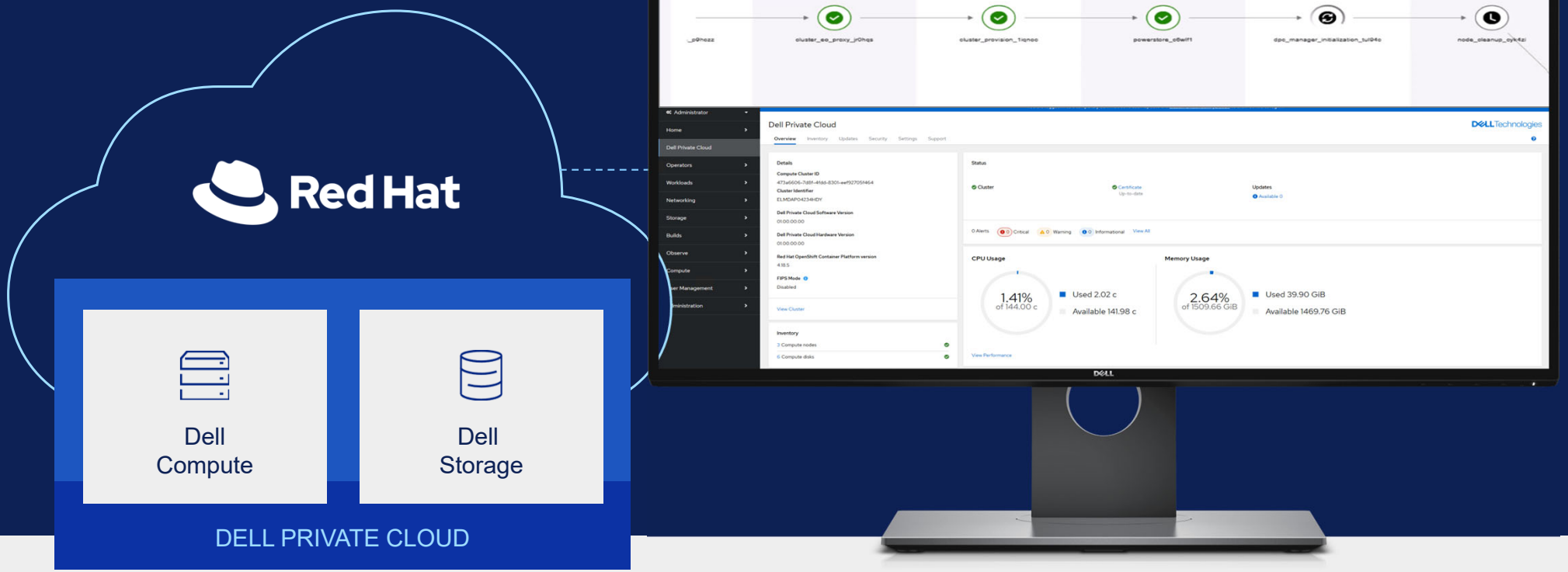
Step 4c: Deploying the extension resources to the OpenShift cluster



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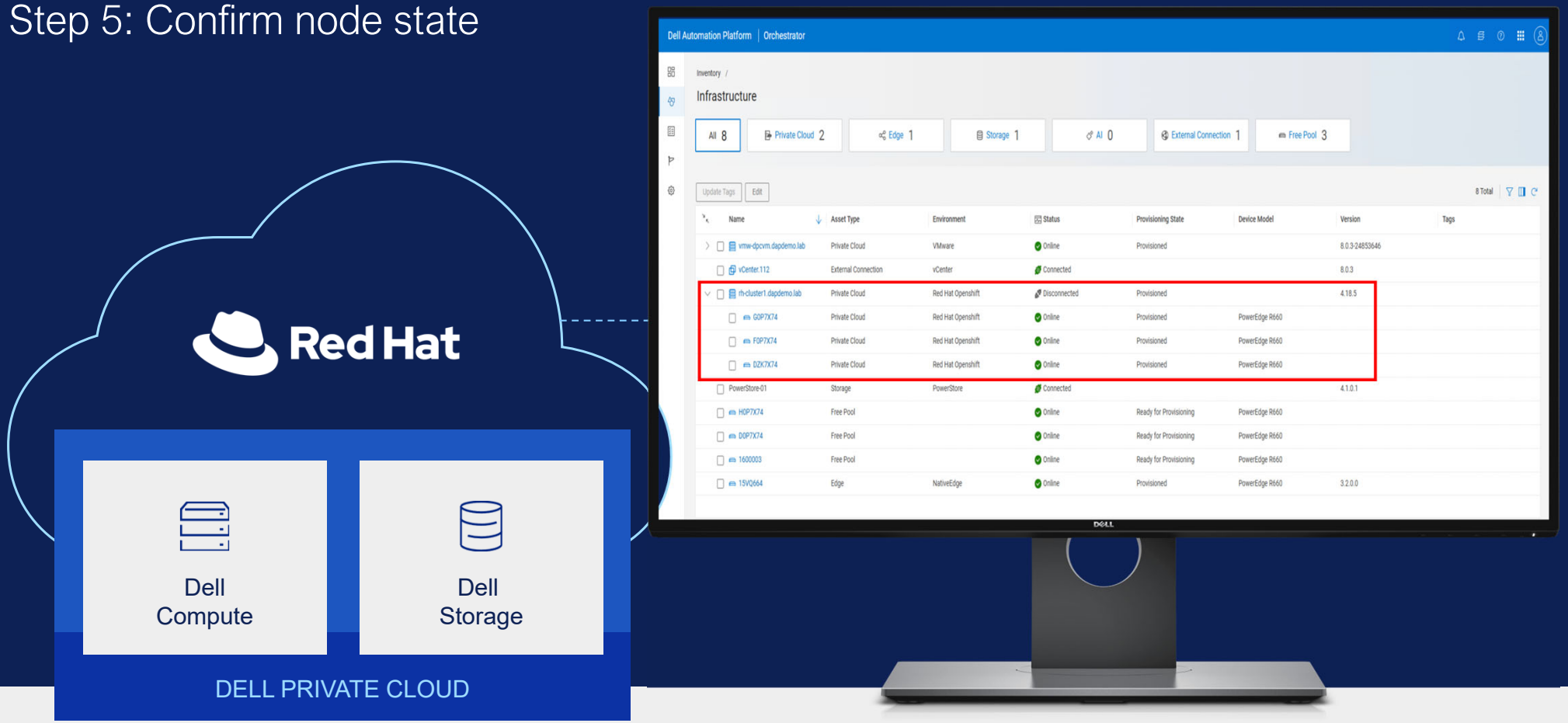
Step 5: Confirm node state



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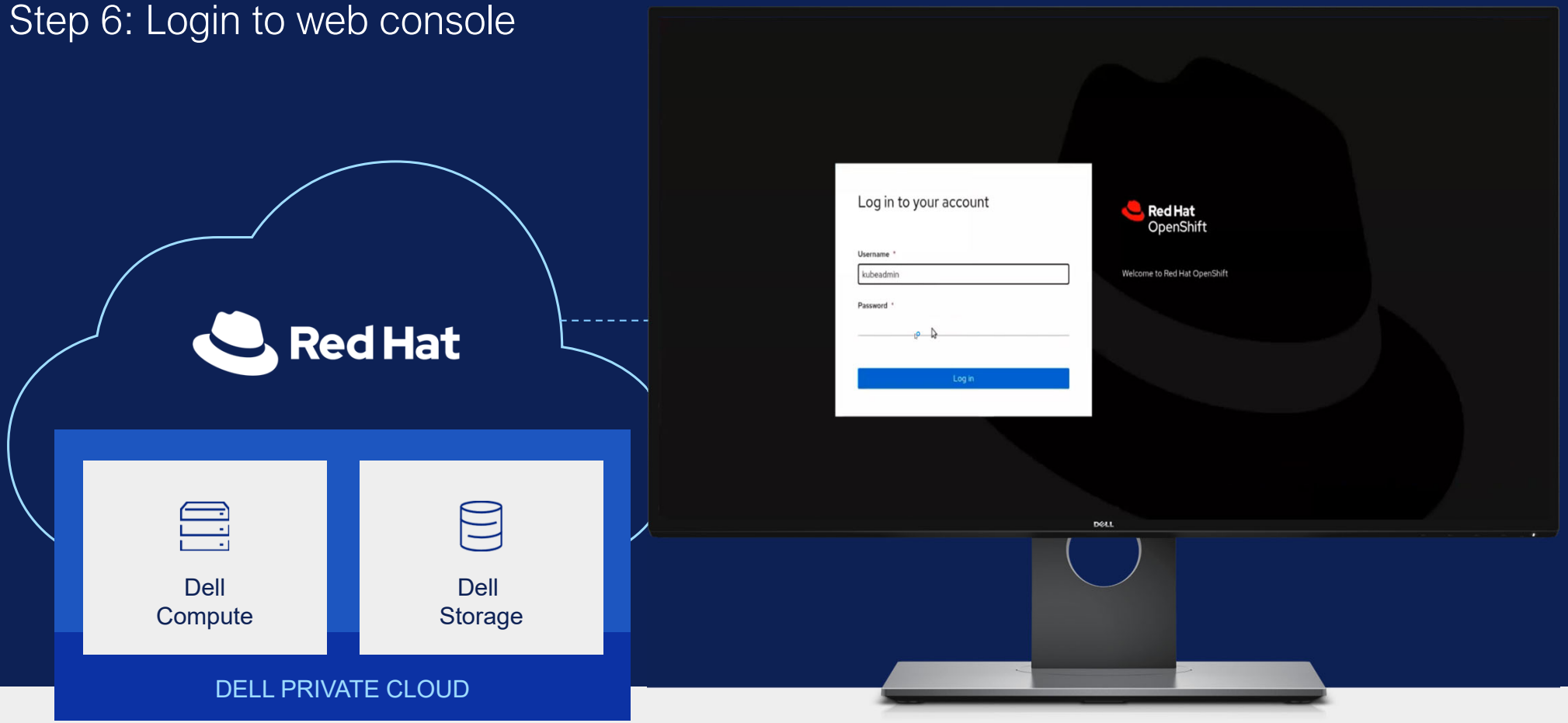
Step 6: Login to web console



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Day 2: Manage and update your private cloud infrastructure with third-party extensions

Red Hat

Dell Compute

Dell Storage

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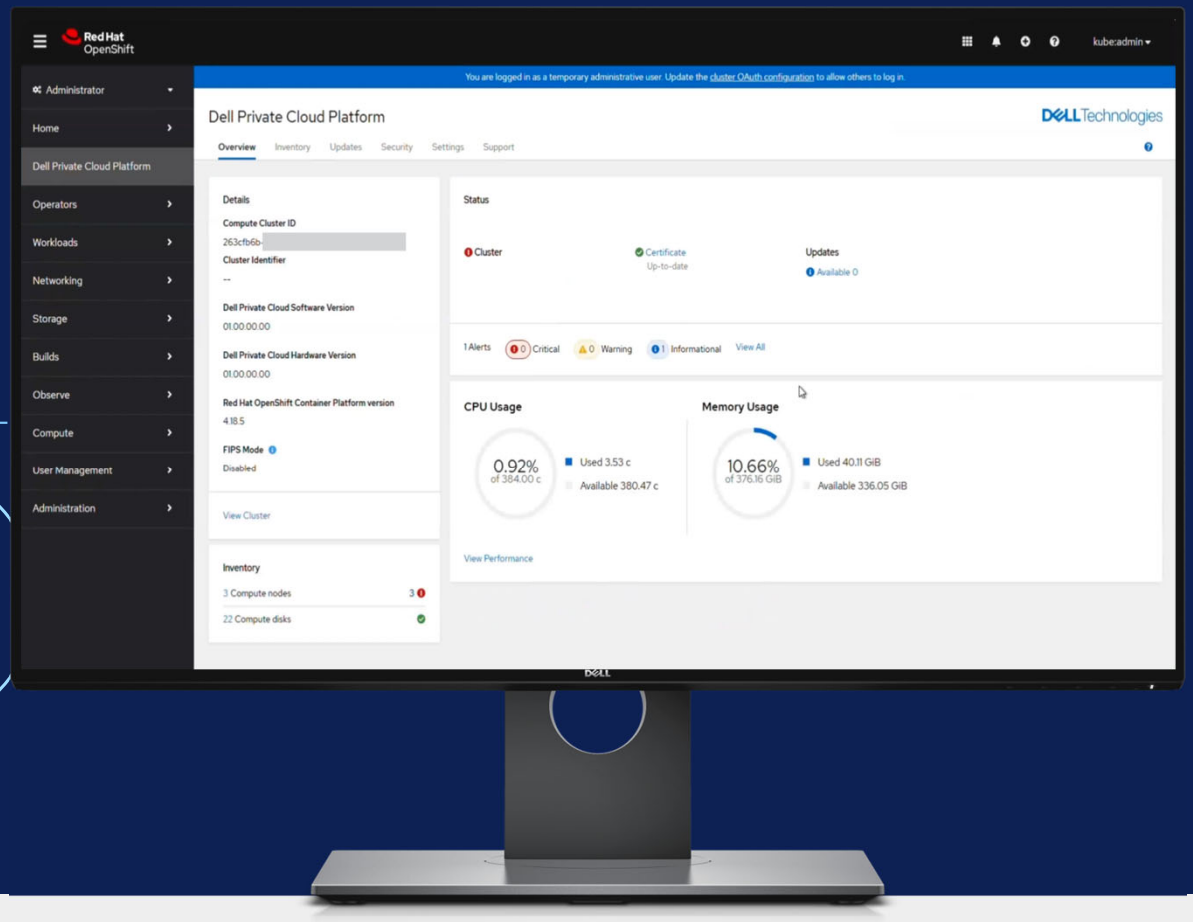

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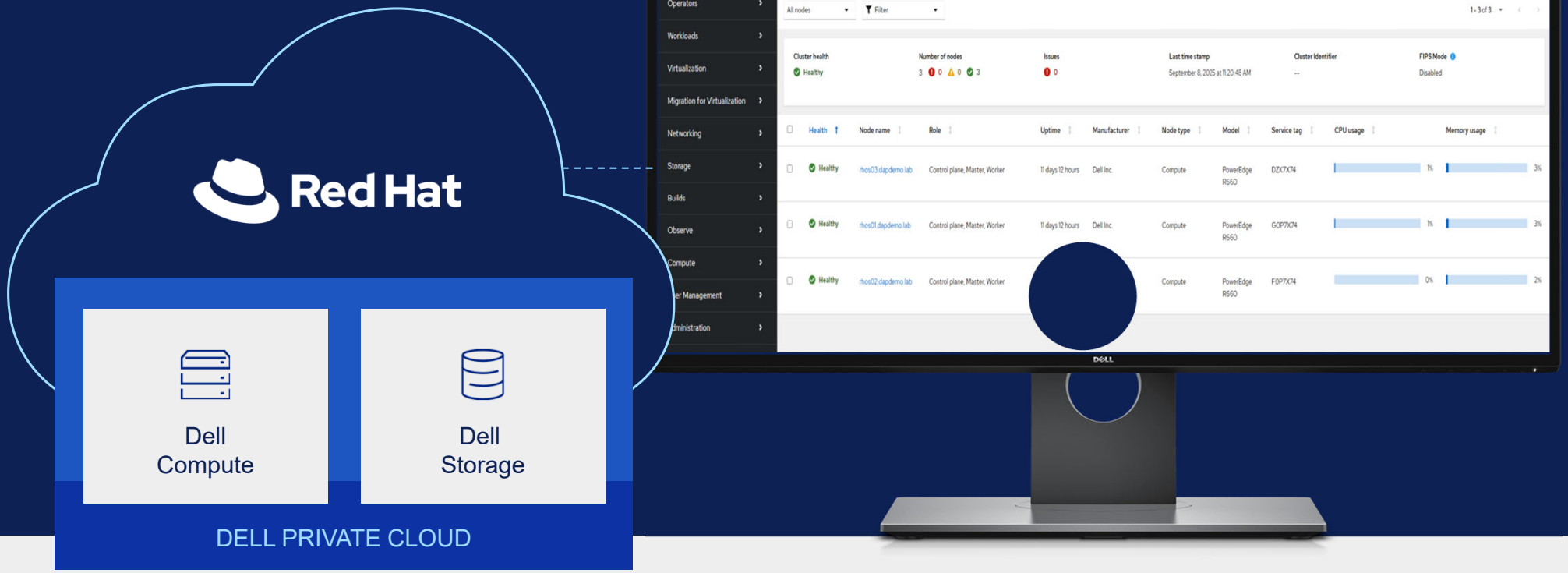
Day 2: Red Hat Cluster View



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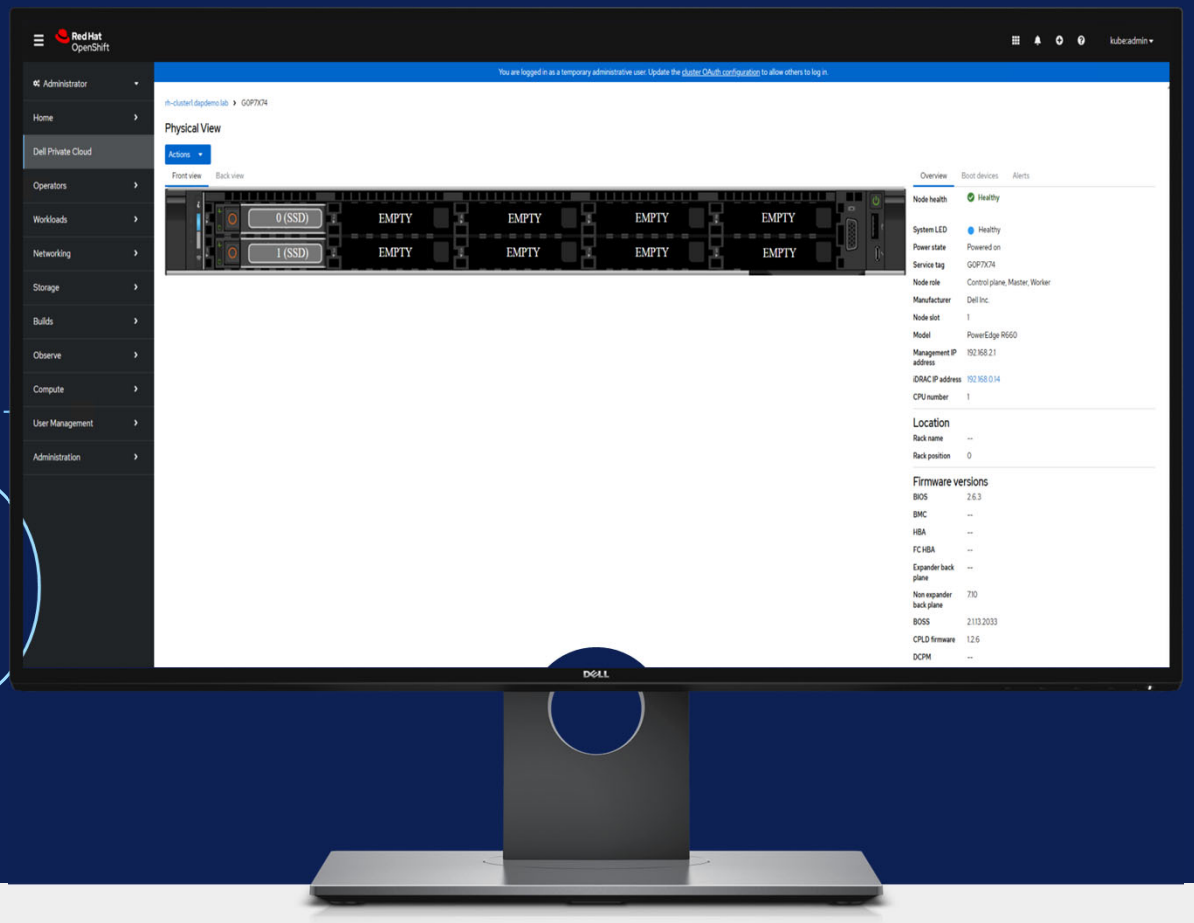
Day 2: Red Hat Node View



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ONBOARD | PROVISION | MANAGE | **DECOMMISSION** | REPURPOSE

Decommission and return infrastructure resources to inventory for repurposing to a different software option

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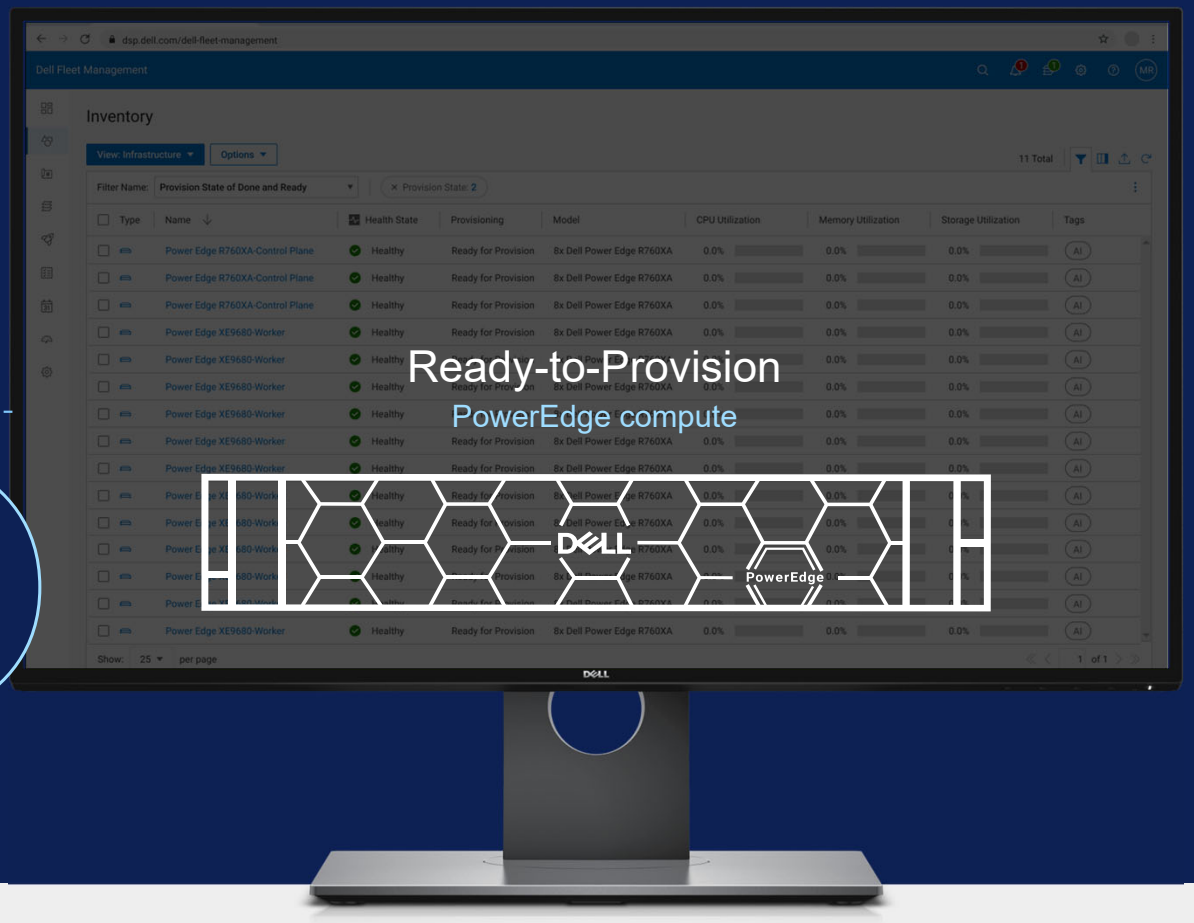

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Reprovision to a different private cloud software ecosystem of your choice

vmware by Broadcom

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Dell Storage

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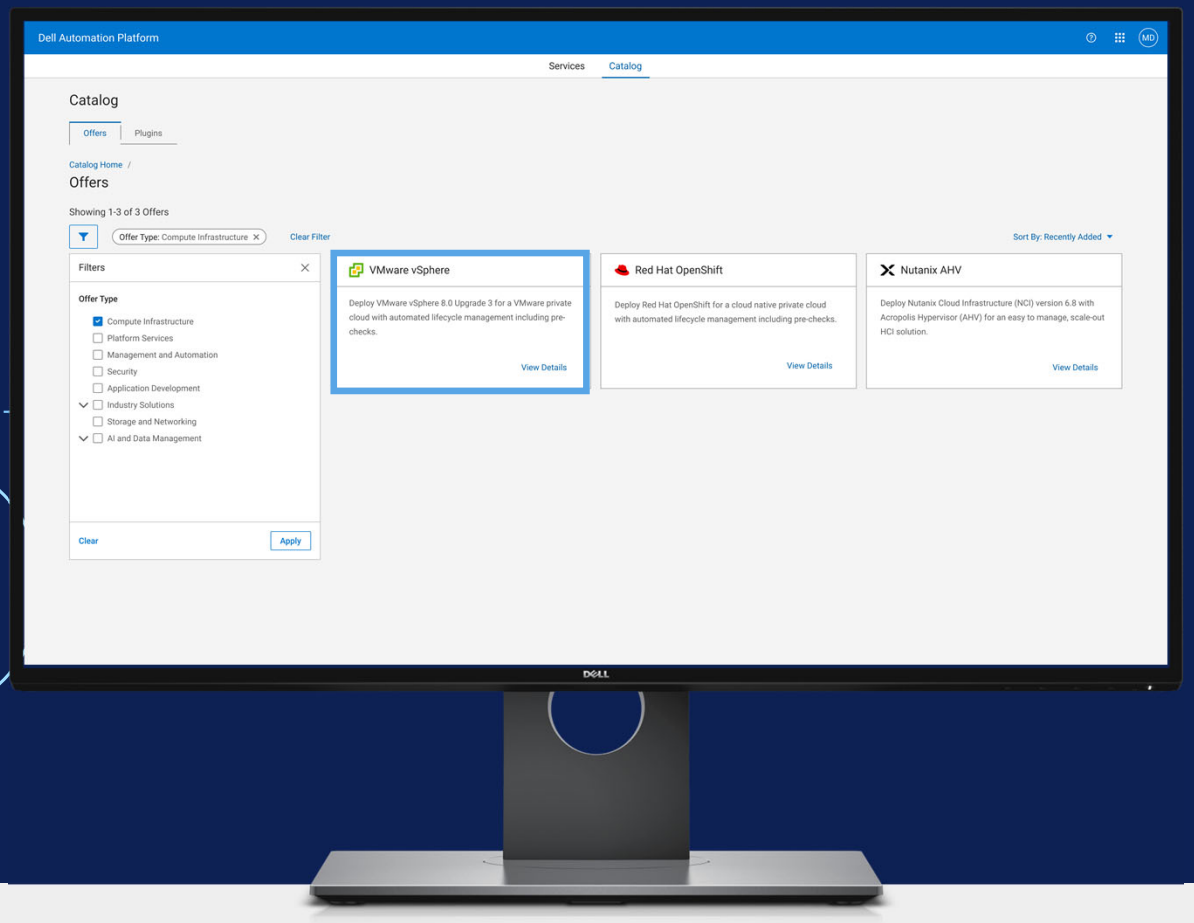

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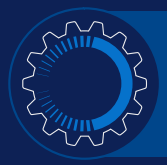
Licensing overview



Dell Automation Platform

Platform License
Platform No-cost subscription added to sales order

Dell Private Cloud

Private Cloud Software
1-,3-,4-,5- year subscription, licensed per PowerEdge node
Licenses are portable between Private Clouds and hardware generations

Disaggregated Infrastructure

Dell PowerEdge
Requires iDRAC Enterprise or Datacenter license per node

Dell Storage
Use standard storage licensing (e.g. PowerStore, PowerFlex)
No additional Private Cloud licenses required

vmware by Broadcom

Bring your own licensing

vSphere Cluster
Any ELA, VCSP, Omnissa bundle, or perpetual license, VVF and VCF* subscription (vSphere Enterprise Plus minimum)

vCenter Server
Customer-managed vCenter with licensing

Red Hat OpenShift

Bring your own subscription

OpenShift Cluster
OpenShift Container Platform Plus, OpenShift Container Platform, OpenShift Kubernetes Engine (OKE), OpenShift Virtualization Engine (OVE)

OpenShift Add On Subscriptions (optional)
Advanced Cluster Management for Kubernetes (ACM) for OKE, ACM for OVE, AI Accelerator, Red Hat OpenShift AI, Ansible

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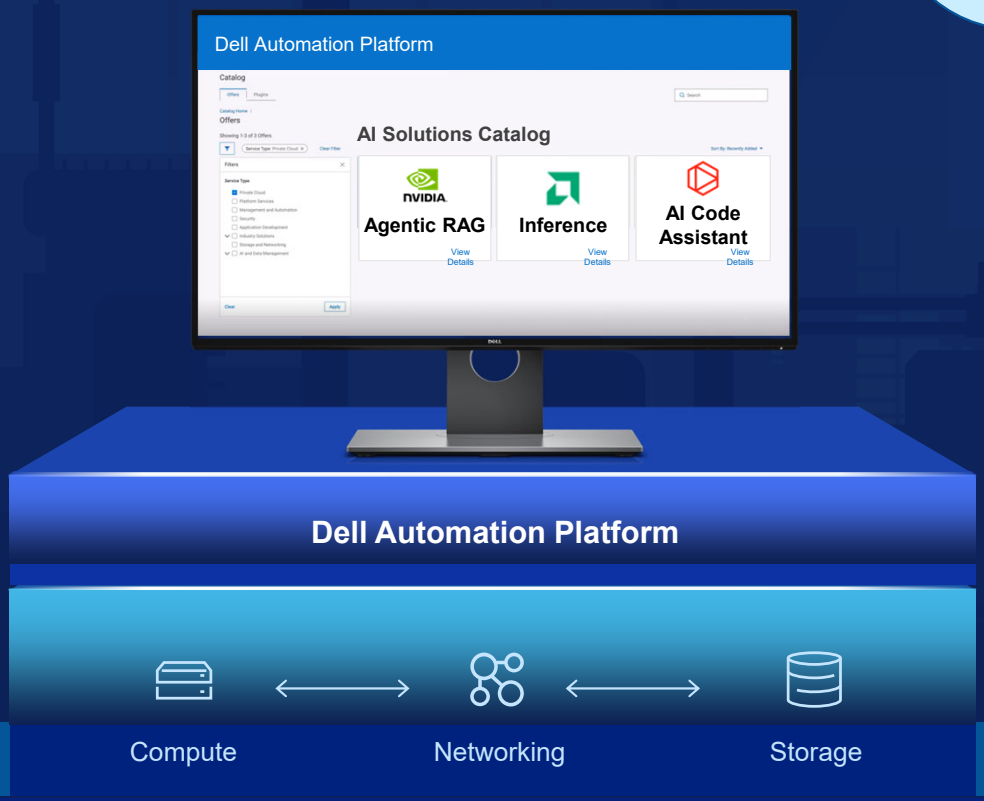
Dell AI Factory

Simplify deployment of AI Solutions



Dell AI Solutions

Faster time to value, lower risk

- A **catalog of optimized solutions** from Dell and our network of partners
- **Simplify** AI deployments with validated and optimized configurations for your system
- **Automated deployment** of AI solutions reduces time, effort, and mistakes
- **Optimized hardware** with GPU accelerated compute
- **Accelerate AI outcomes** from strategy to scalable operations with Dell Services

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Dell NativeEdge

Accelerate AI innovation@edge

Dell NativeEdge

Edge operations, unified.

- **Centralize management** of diverse devices and edge AI applications
- **Free up time** with automation from Day 0 to Day 2 ops and beyond
- **Choose** any application, IoT framework, OT systems, or multicloud
- **Deploy** VM and container applications to existing environments
- **Design and modernize** your edge operations with Dell Services experts

68%
time savings with automation[1]

1-click
cluster expansion[1]

60-sec
application deployment[1]

[1]Enterprise Strategy Group by TechTarget Technical Validation commissioned by Dell Technologies, "Dell NativeEdge - Edge Operations Software Platform," February 2025.

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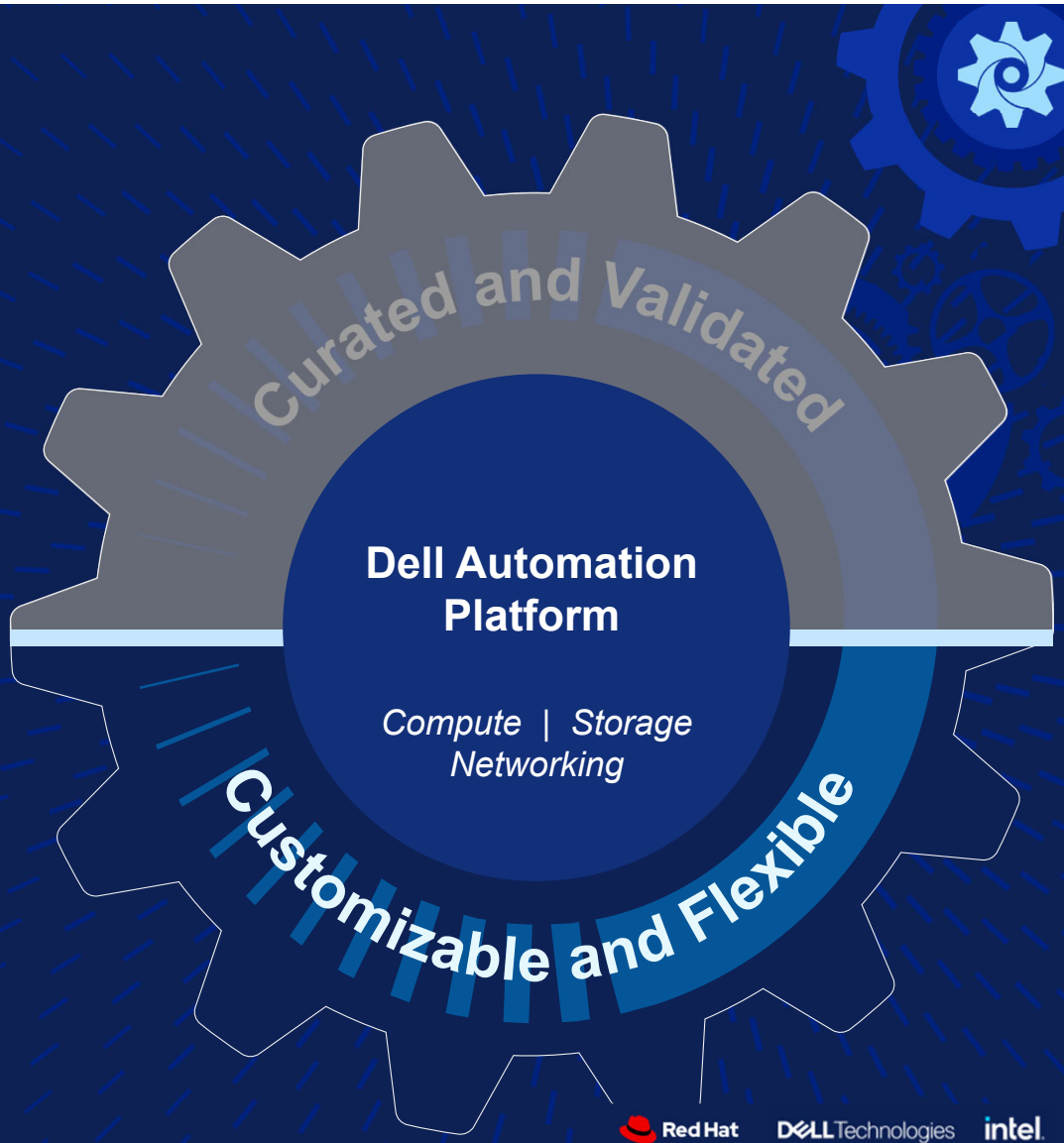
Customizable and Flexible

Customize validated blueprints to fit your needs or build your own to orchestrate your preferred software

Jenkins · Terraform · ANSIBLE · SUSE · Canonical · Backstage · cloudstack (open source cloud computing) · argo · Prometheus · kubernetes · Grafana



Build your own

Blueprint and Orchestrate software based on your needs to run on flexible and dynamic hardware

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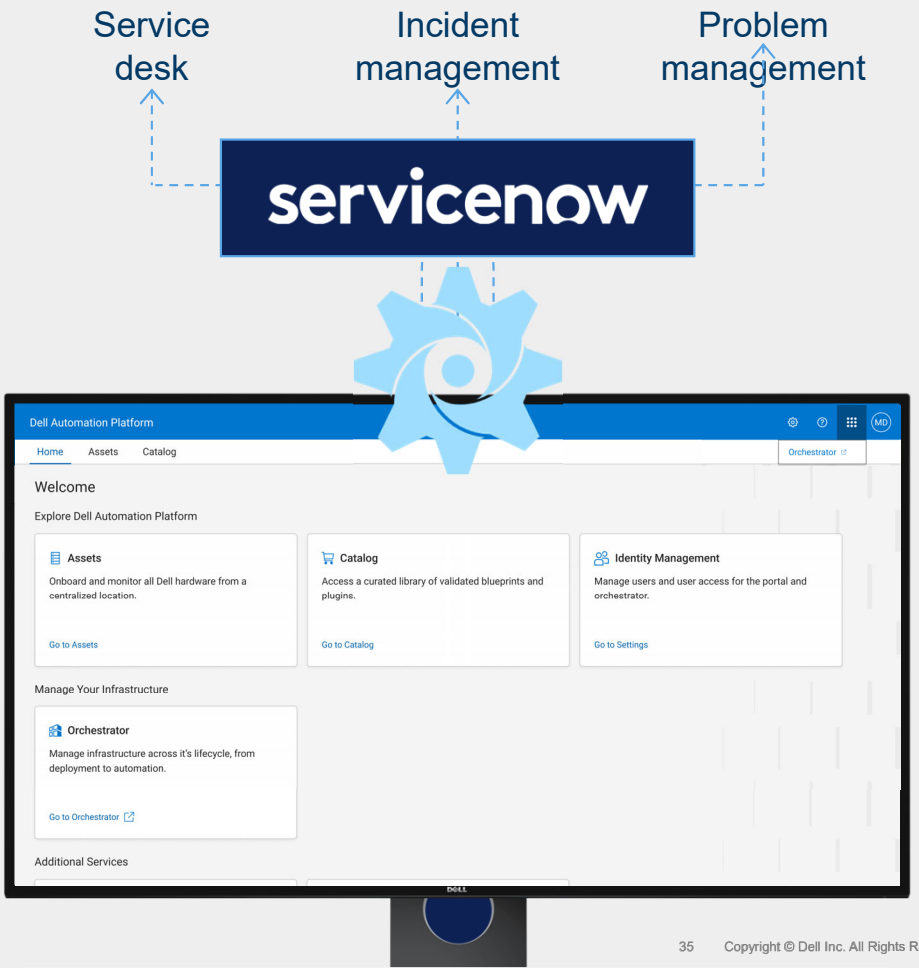
Strategic Ecosystem Integrations



Embed Dell Automation Platform within existing processes

- Automate support processes with direct integration into ServiceNow
- Equip stakeholders with familiar support and services tools
- Expedite time-to-resolution for priority incidents

servicenow
Consulting & Implementation Partner of the Year
2025

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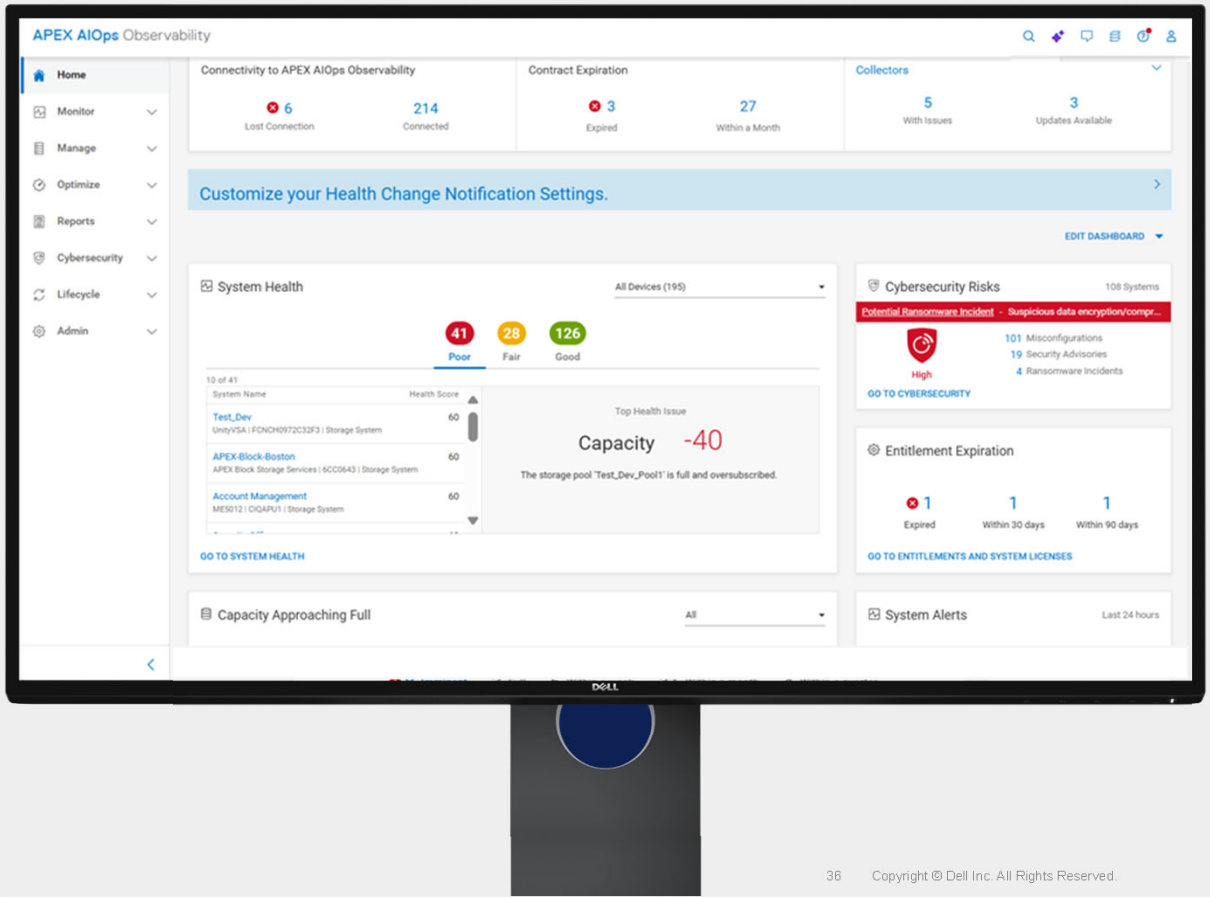
Observability and AIOps



Seamless extension to Dell AIOps capabilities

- Predictive failure insights for proactive capacity planning, maintenance, and incident prevention
- Aggregate data, including logs, metrics, events, network packets, alerts, and more
- Apply machine learning algorithms and advanced analytics to the collected data to identify patterns, correlations, and anomalies
- Drift management and event correlation

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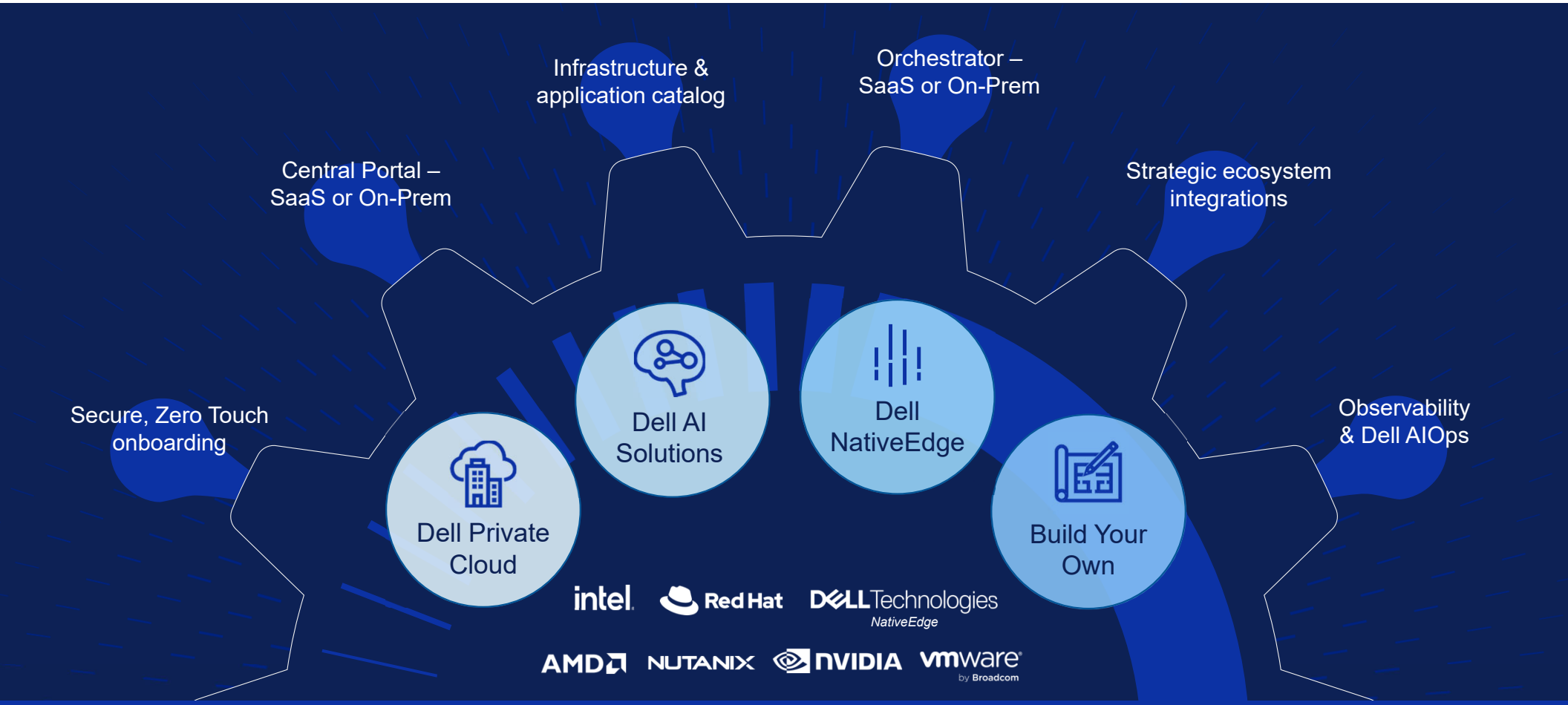

Dell Automation Platform

We automate, so you can innovate

Thank you

Web: Dell Automation Platform
or mail to luigi.demeo@dell.com

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