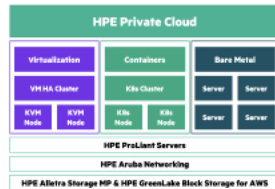


Coming soon

HPE's virtualization capability is planned to be part of HPE Private Cloud, providing a future-proof platform that supports legacy, cloud-native and AI workloads



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  - Performance for data-intensive workloads
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## HPE GreenLake for Private Cloud Business Edition

Different solution types

### HPE GreenLake - Paid up front



### HPE GreenLake - Pay as you go



# Maximize Your VMware Environment Using Private Cloud for Business

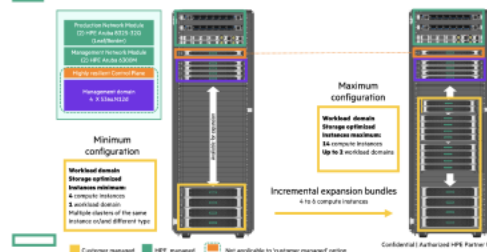
Steve Mancini HPE Storage Specialist

Elevate your cloud experience

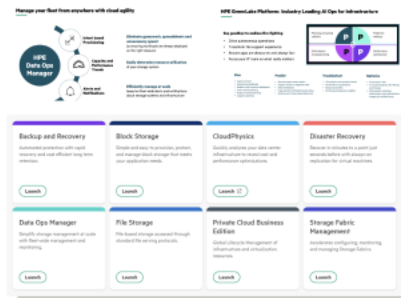
# HPE GreenLake Private Cloud Business Edition

## HPE GreenLake for VMware Cloud Foundation—co-engineered infrastructure

Single rack minimum to maximum configurations



- Simple Cloud operational **experience** across all data services
- True **hybrid cloud** platform for managing on-premises and cloud-based IT infrastructure
- One platform means **one** place to go for simplified data storage, management and protection



HPE GreenLake Platform

Run any app without compromise with a 100% data availability guarantee



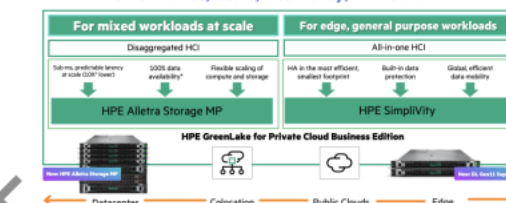
## History Lesson

Customer journey towards IT simplicity



## Architecture for every workload

Performance, Scale, Resiliency, Protection



# Maximize Your VMware Environment Using Private Cloud for Business

Steve Mancini HPE Storage Specialist

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*Elevate your cloud experience*



**GreenLake**

*Private Cloud Business Edition*

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# History Lesson

## Customer journey towards IT simplicity

### **HYPERCONVERGED**

ARCHITECTURE

- ✓ SIMPLE EXPERIENCE
- ✓ VM-CENTRIC OPERATIONS
- ✓ GENERAL PURPOSE AND VDI

2010

### **LEGACY CONVERGED**

ARCHITECTURE

- ✓ PRE-VALIDATED CONFIG
- ✗ COMPLEX TO MANAGE
- ✗ MONOLITHIC - BIG IRON



# The Hyperconverged experience has made life easier



## Simple to Deploy

Software-defined infrastructure  
abstracted from hardware

Single pool of resources  
solves Day 0 and 1 issues



## Simple to Manage

Unified management  
eliminates silos

Policy-based automation  
removes manual work



## Simple to Scale

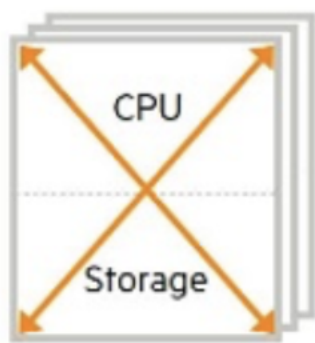
Start small and  
scale out in increments

Easy to upgrade  
software and hardware



## But compromises exist for mixed workloads at scale

Tradeoffs rooted in the architectural design of HCI



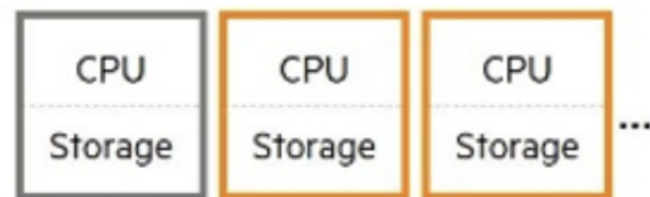
### Resiliency penalty

Downtime with failures



### Performance penalty

High, variable latency at scale



### Overprovisioning penalty

Fixed compute + storage scaling

Resulting in poor TCO and higher costs



# VMWare by Broadcom

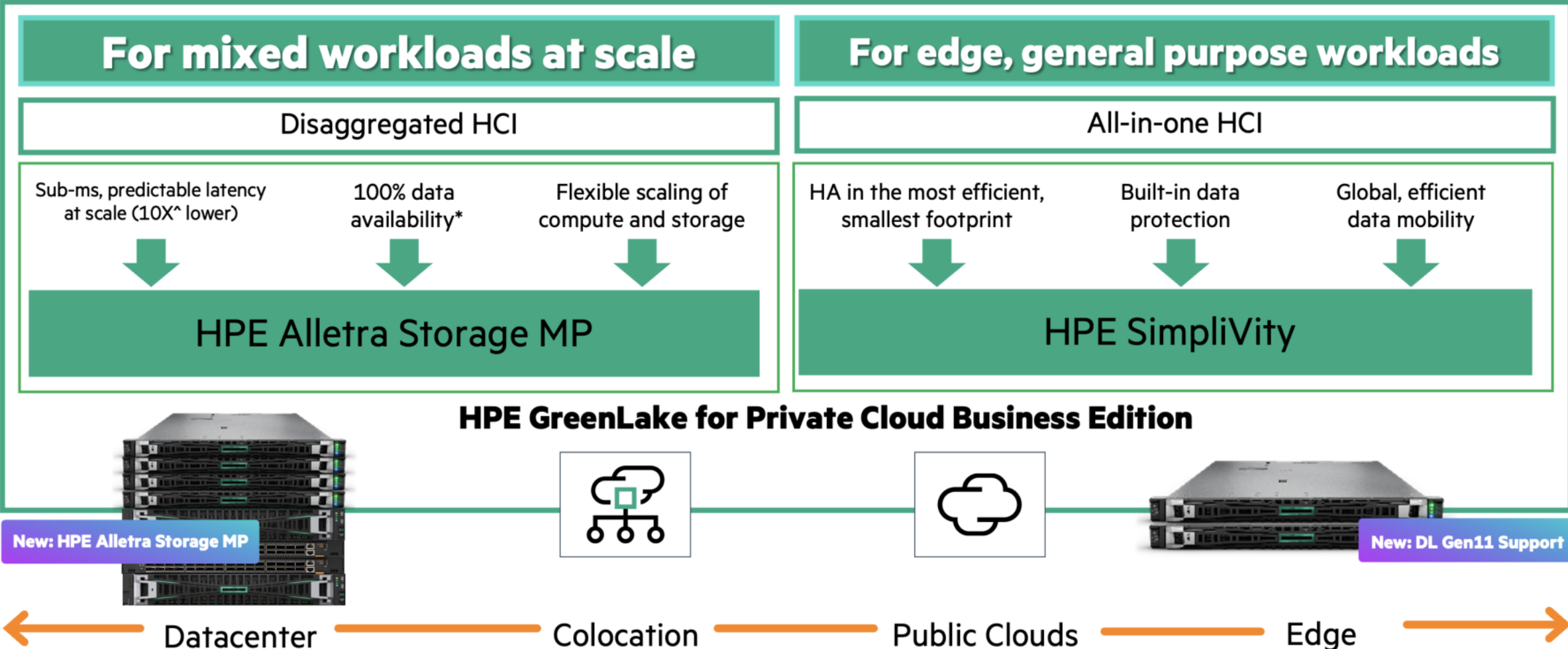


VMware by Broadcom has two primary offerings:

1. **VMware Cloud Foundation** – the flagship enterprise-class private cloud platform for customers to run their business-critical and modern applications – in a secure, resilient, and cost-efficient manner.
  - VMware Cloud Foundation is a full-stack Infrastructure as a Service (IaaS) platform that delivers software-defined compute, storage, networking, security, and management.
  - Integrated self-service infrastructure platform to deploy VMs/containers for developer agility.
  - Hardened platform offering built-in resilience, scaling, and clustering for non-stop operations.
  - Provides cloud agility to scale infrastructure without scaling staff, delivering cloud consumption on-premises.
  - Provides automation and orchestration to simplify Day 0, Day 1, and Day 2 tasks.
  - Available as a single SKU to simplify full stack deployment.
2. **VMware vSphere Foundation** – a simplified, enterprise-grade workload platform for our mid-sized to smaller customers.
  - VMware vSphere Foundation solution integrates vSphere with our intelligent operations management to provide the best performance, availability, and efficiency with greater visibility and insights.
  - vSphere Foundation can be upgraded to a Hyperconverged Infrastructure (HCI) solution with an optional software-defined storage (vSAN) add-on.

# Architecture for every workload

## Performance, Scale, Resiliency, Protection



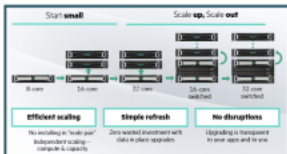
# Run any app without compromise with a 100% data availability guarantee

## Modernize with a timeless solution

- Satisfy new government mandates with an ever-evolving software-defined solution

## Scale without limitations

- Independently scale capacity and performance
- Start small, scale big
- Mix hardware generations
- Non-disruptive upgrades with data in place
- Fewer spares via common hardware for block & file
- Reduce e-waste with non-disruptive upgrades



## HPE Alletra Storage MP



## Always on

### 100% availability

Guaranteed as standard benefit<sup>1</sup>

### Most advanced DR and HA

Active stretch cluster

## Always fast

### Massive parallelization

All-active and multi-node

### High performance density

Ideal for mixed workloads

## AI-driven

Built with industry's most advanced AI for infrastructure

## Built for resilience and speed

Simple.  
Resilient.  
Efficient.



## Ideal for:



Virtual  
Machines



Consolidated  
mixed workloads



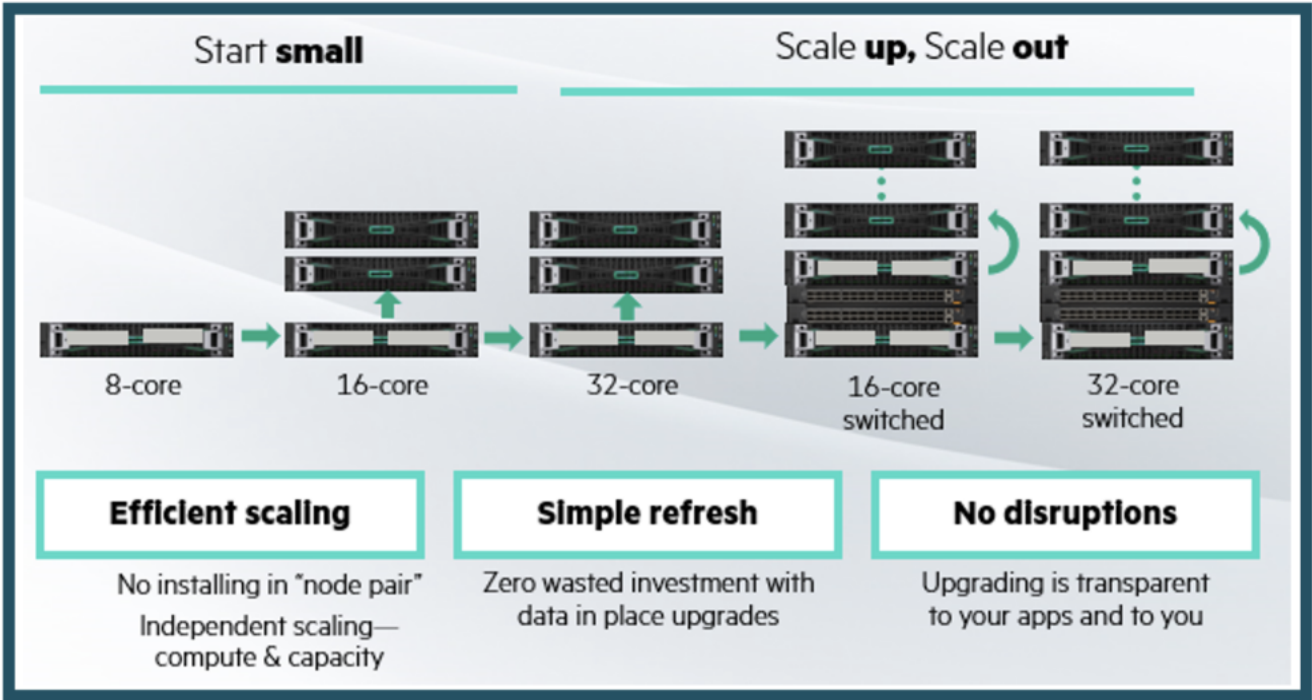


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# HPD Alletra



## Built for resilience and speed

Simple.  
Resilient.  
Efficient.

### Always-on availability

Unmatched choice from 99.999% to 100% data availability to meet SLAs



### Fault tolerant

No single point of failure; all-active design; hardware redundancy with the ability to tolerate simultaneous failures



### 1-click multi-site upgrades

Intelligent, nondisruptive, full-stack lifecycle management to automate operations



### Sub-milliseconds latency

As low as 200 microseconds data response time with Hybrid Flash or All-NVMe



### Run with data services

VM-centric data services like deduplication, encryption via policy automation



### Built-in data protection

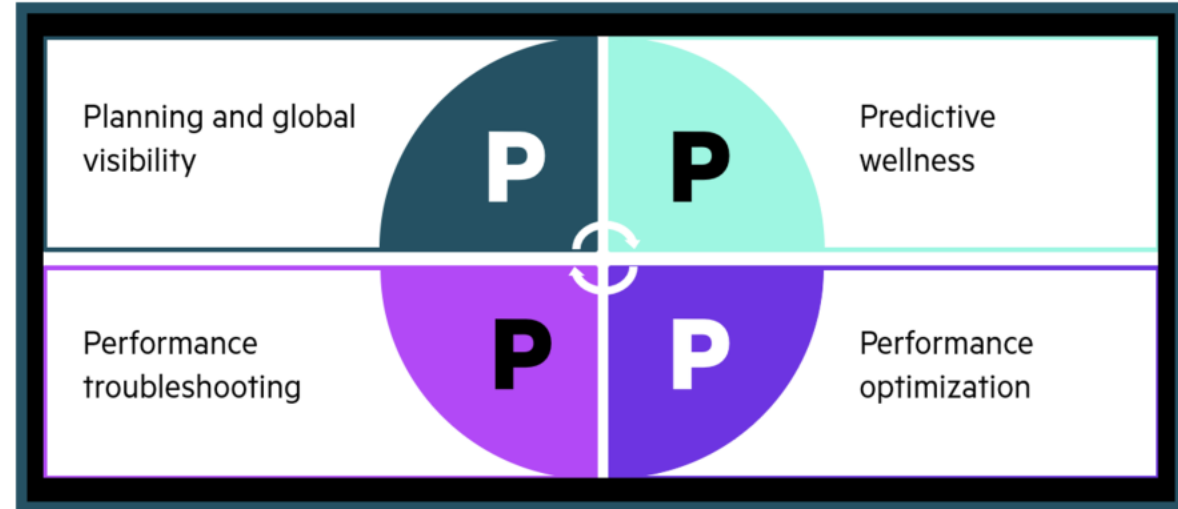
Built-in backup and disaster recovery reduces costs and risk



# HPE GreenLake Platform: Industry Leading AI Ops for Infrastructure

## Say goodbye to endless fire-fighting

- Drive autonomous operations
- Transform the support experience
- Ensure apps are always-on and always fast
- Focus your IT team on what really matters



### Plan

- Asset inventory
- Operational dashboard
- Reseller multi-customer dashboard
- Asset refresh planning
- Support renewal planning
- Capacity planning

### Predict

- Manual support case creation
- Support access to diagnostic data
- Email notification
- View warranty entitlements and status
- Wellness alert (rules-based detection)

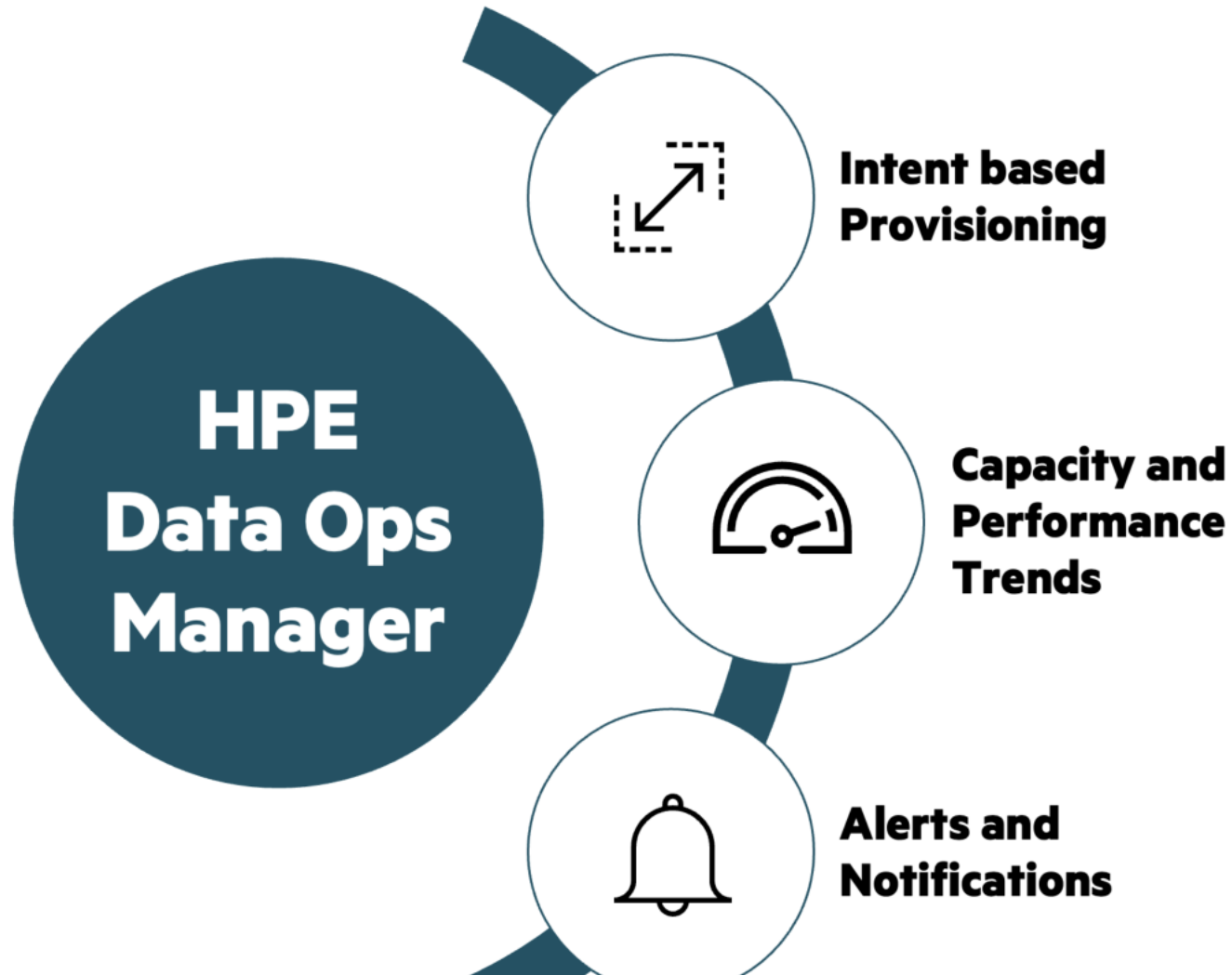
### Troubleshoot

- VM analytics and statistics (basic)
- Performance visualizations
- Resource statistics
- Performance headroom visibility

### Optimize

- Find inactive VMs
- AI recommendations for VMware and Storage
- Performance saturation, performance score, performance insights (for all flash-only)

# Manage your fleet from anywhere with cloud agility



**Eliminate guesswork, spreadsheets and unnecessary spend**

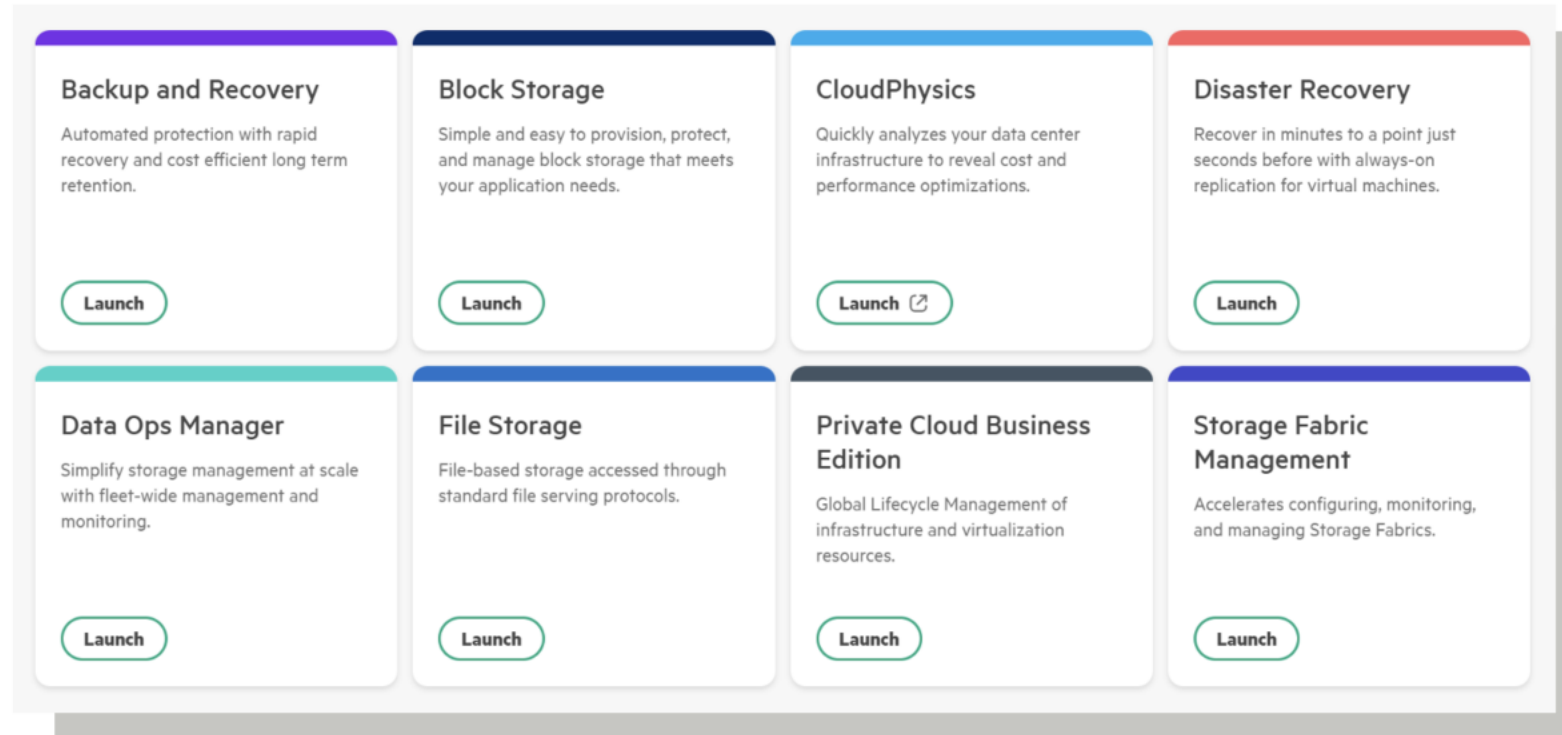
by ensuring workloads are always deployed on the right resource

**Easily determine resource utilization** of your storage system

**Efficiently manage at scale**

based on fleet-wide alerts and notifications about storage systems and infrastructure

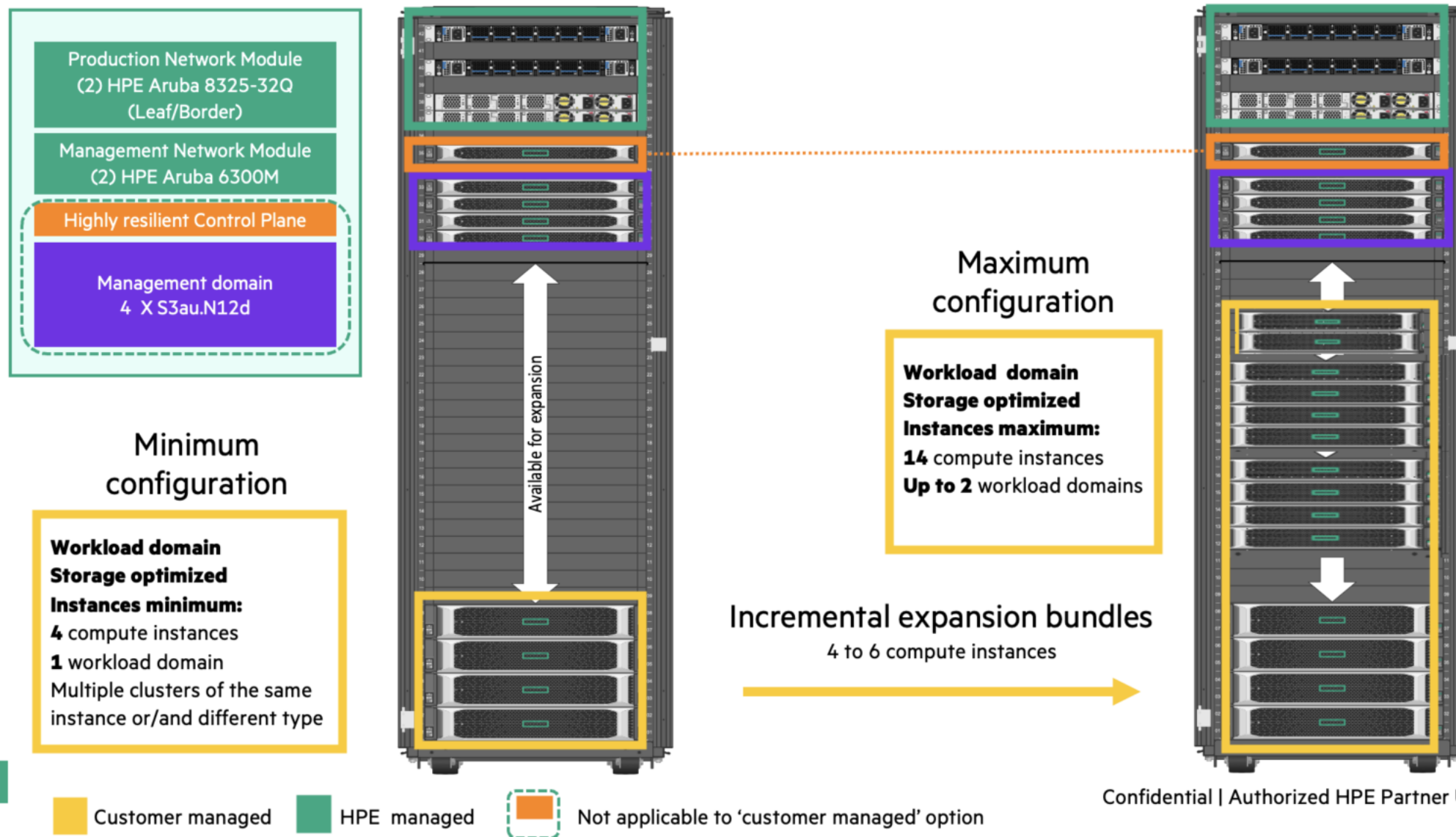
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## HPE GreenLake Platform

# HPE GreenLake for VMware Cloud Foundation—co-engineered infrastructure

## Single rack minimum to maximum configurations





## Partnering to deliver outcomes



### Accelerate modernization

**5x**

faster deployment

**90%**

faster environment provisioning

**65%**

shorter time to deploy digital projects

**61%**

faster release time

**40%**

increased IT team productivity



### Optimize operations

**50%**

lower cost per virtual desktop

**\$2.72M**

reduction in hardware and software spend

**85%**

less unplanned downtime

**30-40%**

CAPEX savings by preventing overprovisioning



### Secure your environment

**99.8%**

detection rate

**100%**

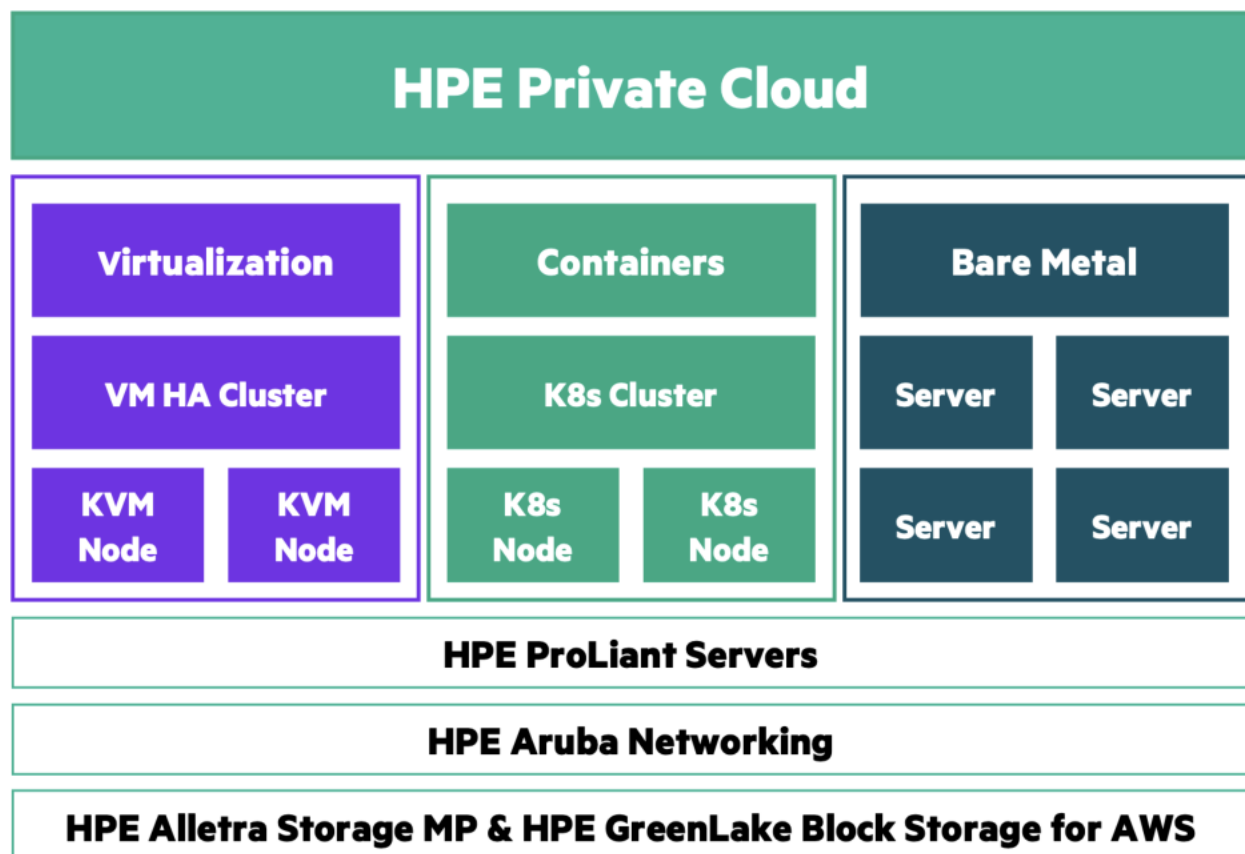
malware protection across any app, cloud, or device

**60%**

reduction in the number of traditional firewalls required

Coming soon

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# HPE GreenLake

## for Private Cloud Business Edition

Different solution types

### HPE GreenLake - Paid up front



Managed by the customer through the HPE GreenLake platform



Choice of technologies with HPE Alletra dHCI or SimpliVity

#### Managed through the HPE GreenLake platform

The customer or partner manages their VM environment and public cloud through the platform (Data services cloud console)

#### Technology

Customer can choose from HPE Alletra dHCI or HPE SimpliVity, according to the size or performance of the environment.

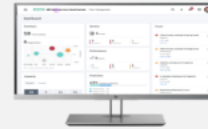
Solution comes with 24x7 remote support

### HPE GreenLake – Pay as you go



#### Proactive support and reporting

Assigned HPE delivery team, accelerated support experience, consumption analytics and capacity planning. Deliverables vary according to SLA



Managed by the customer through the HPE GreenLake platform



#### Declining price per unit as solution scales

Tiered pricing bands established for the term of the contract. Eliminates the time required for new purchase budget approvals



Choice of technologies with HPE Alletra dHCI or SimpliVity

#### Overage capacity + Pay for what you use

Customer is able to scale up into additional capacity when required and only pay if used

#### Technology

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Solution comes with 24x7 remote support