



HPE VM Essentials: Un hyperviseur qui simplifie et optimise *le coût de votre infrastructure virtuelle.*

Thomas Houver – *Business Development Manager Datacenter, Bechtle Suisse*

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Bechtle IT Forum, Lausanne.

24.06.2025

...
25
BITF



#BITF25

The world is a hybrid

but the true cloud experience is not everywhere

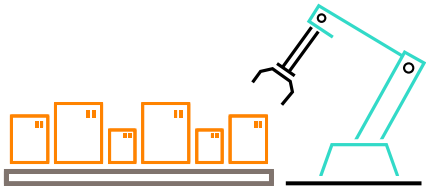
67%

Multi-gen IT | Data sovereignty | Security & Compliance |
Data costs and control | Latency, real-time decision making

33%

Speed | Agility | Self-serve | Pay-per use

Edge locations



Private data center



Colocation facilities



Public clouds



aws

Microsoft
Azure

Google Cloud



Alibaba Cloud

Source: Q2 Cloud Pulse Survey, July 2023, IDC

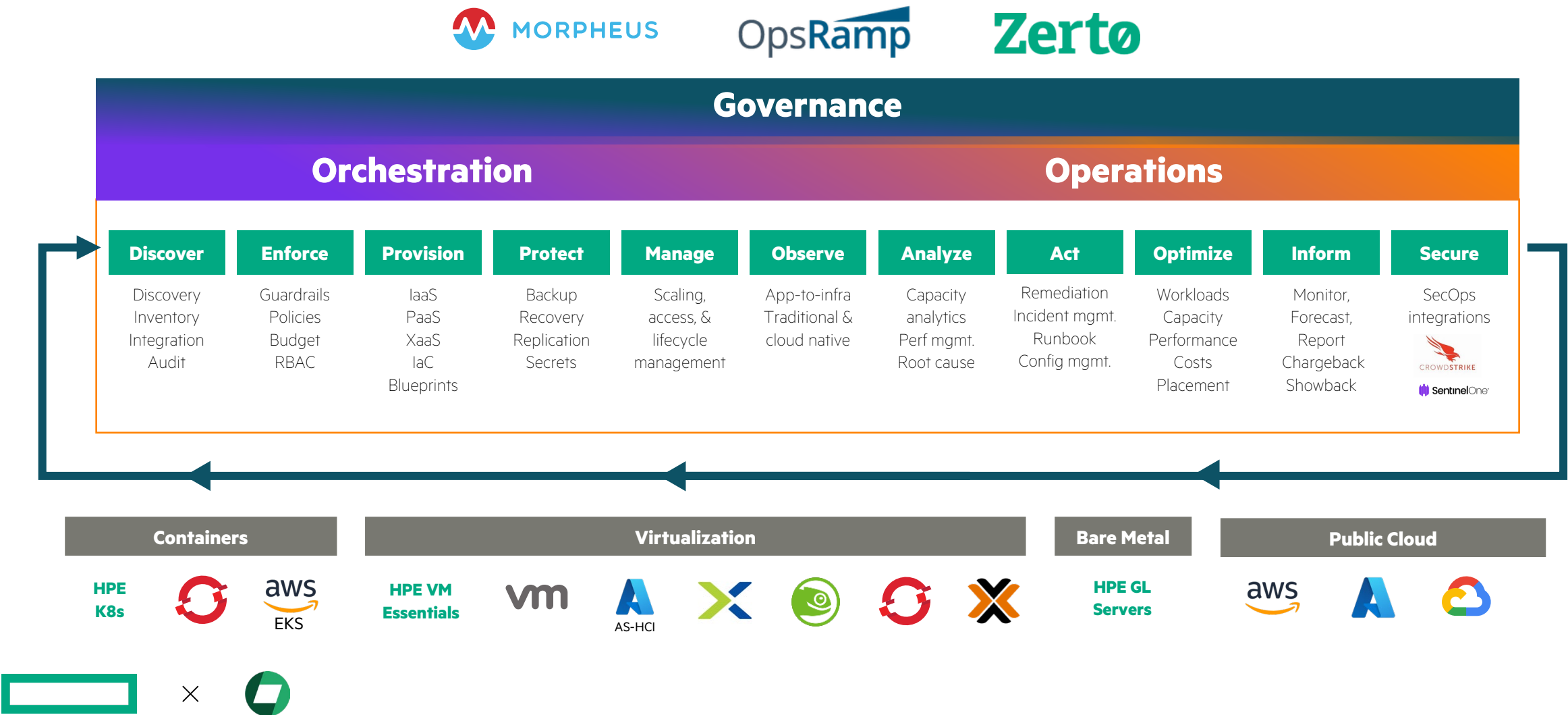


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Unify Hybrid Cloud Operations for all your Apps & Ops from Day-0 to N

ITOps, SecOps, DevOps, FinOps



Licensing changes have caused significant disruption for customers

- **Bundles only:** vSphere Standard, Essentials+, Foundation (VCF, VVF)
- **No more perpetual licenses**
- **No more ELAs**
- **Lower discounting**
- **Extra charges** (e.g., vSAN)

Effective price increase of

2-4x

for most customers*

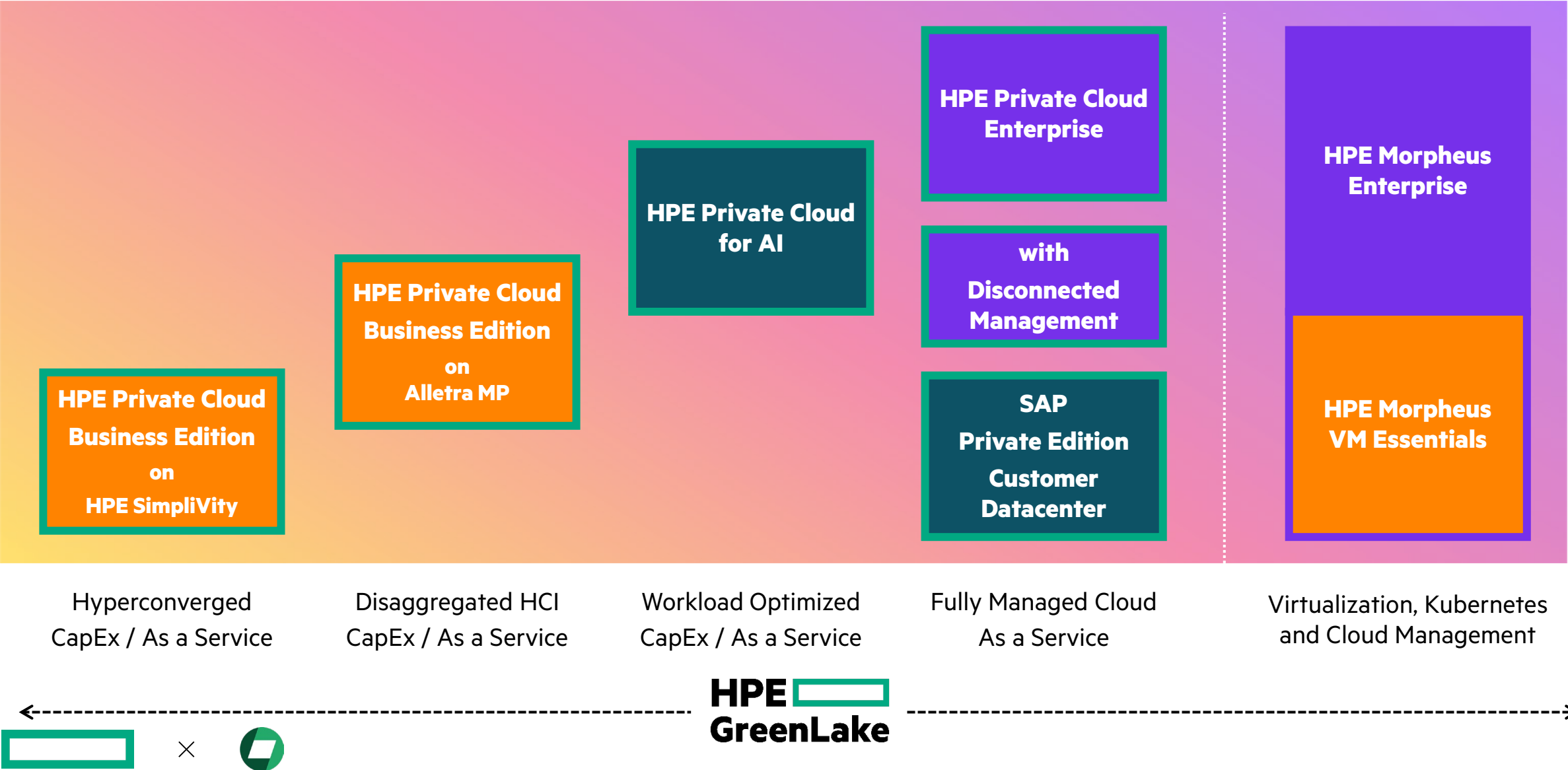
Note: *Some customers experience effective price increases of 15x or more



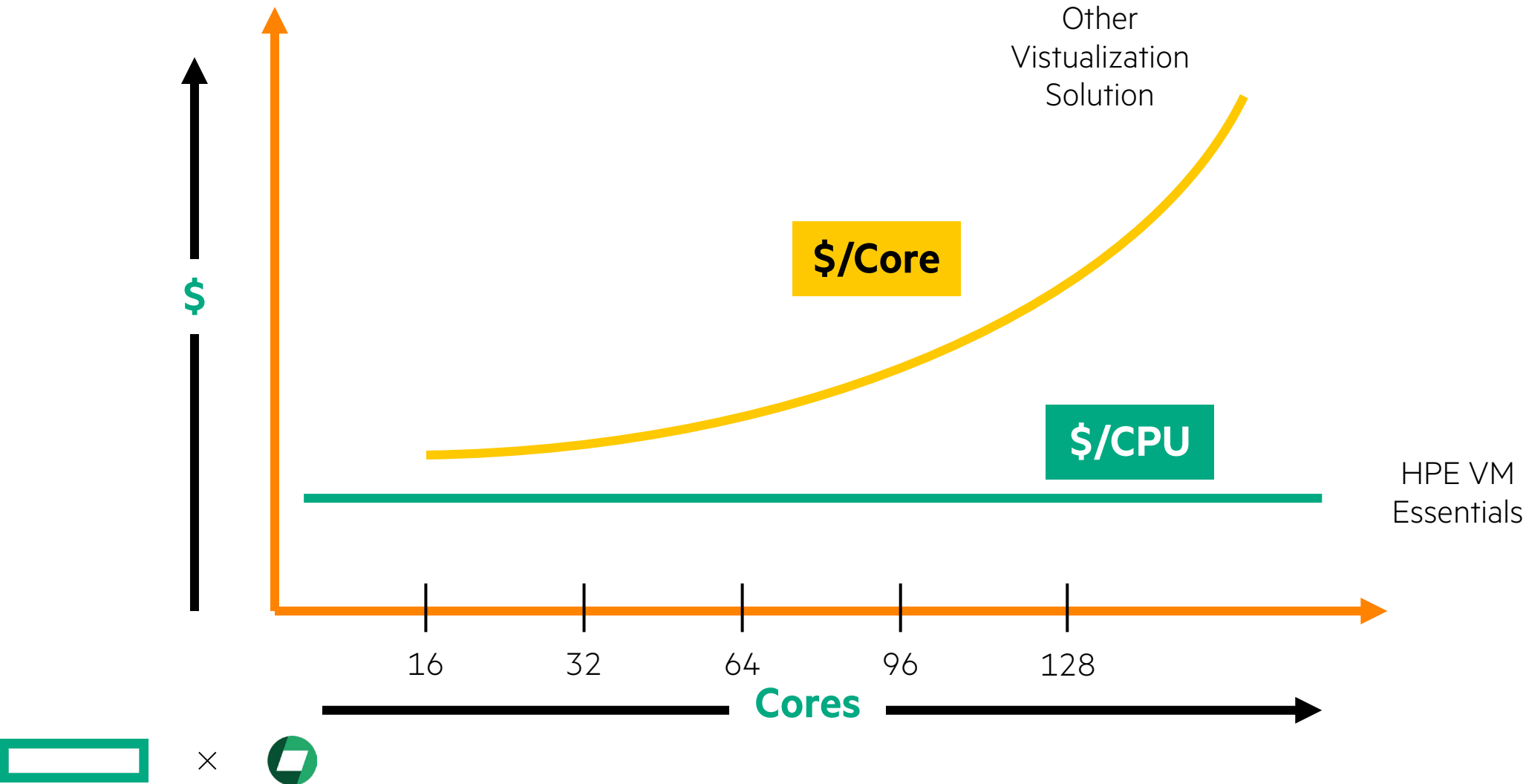
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HPE VME globally used in our portfolio – powered by Morpheus

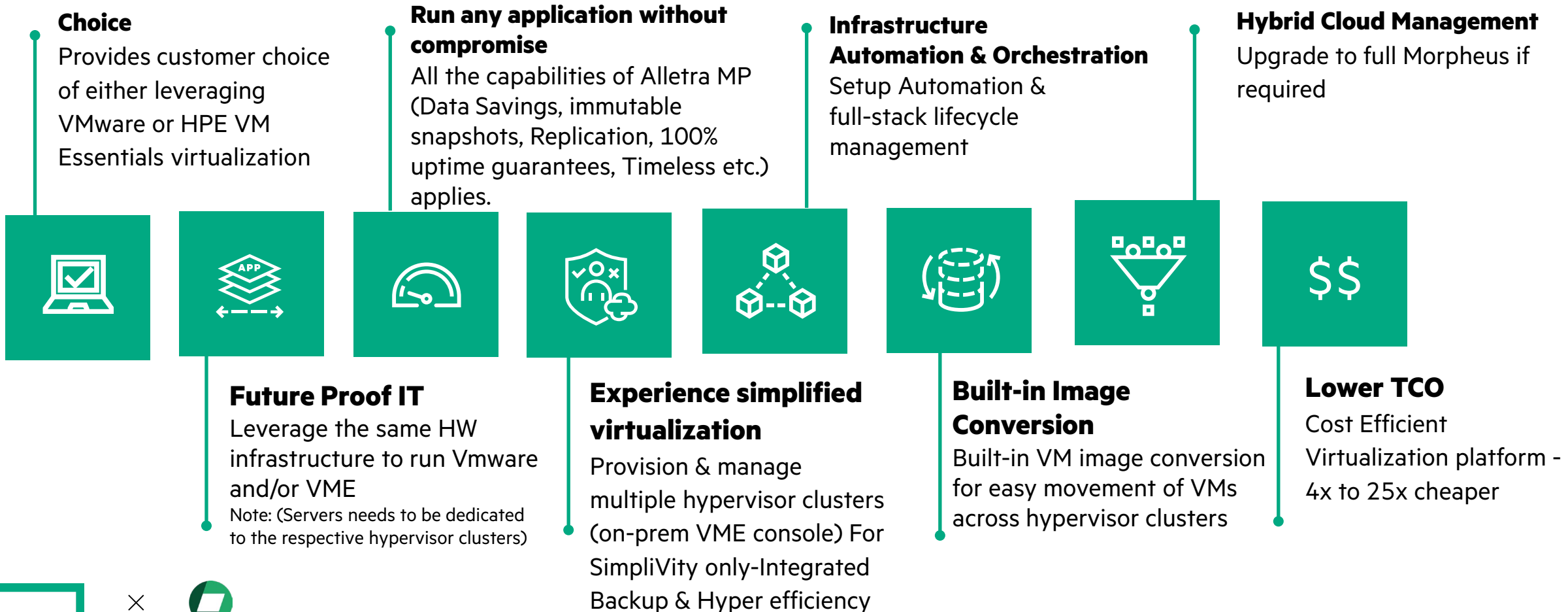


HPE VME Licensing



Simple. Hybrid. Effective.

THE VALUE OF HPE GREENLAKE FOR PCBE WITH HPE VME ESSENTIALS



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HPE VM Essentials unifies HPE VME hypervisor & VMware

- **Reduce costs with HPE VM Essentials integrated hypervisor**

Featuring core capabilities to diversify VM estates including storage optionality (local, NFS, iSCSI, Fibre Channel), distributed workload placement, VM HA and live migration, data protection via snapshots and native backup, and DR with Zerto¹

- **Simplify management across VMware and HPE VME**

Connect existing VMWare® clusters for management and VM-vending into ESXi and HPE VME hypervisor from one interface. Also includes IPAM and DNS integration, automation execution, secrets management, and VMWare to KVM image conversion

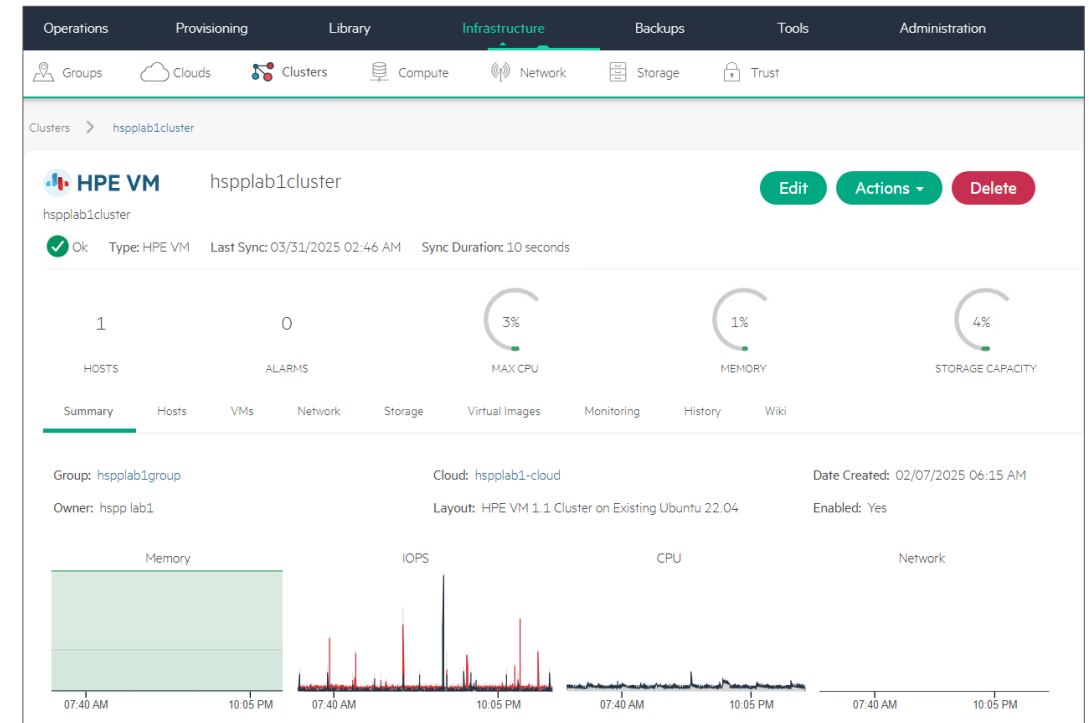
- **Future-proof IT with flexible consumption & upgrade paths**

Available as standalone software and integrated into HPE Private Cloud. Customers can upgrade to full Morpheus PlatformOps for hybrid cloud management, K8s support, governance, and FinOps capabilities







- **Lower risk with enterprise-grade support & ecosystem**

Building on a proven KVM core, HPE VM Essentials includes HPE's enterprise-class global support. HPE is working with its ISV Complete Partners such as Cohesity to expand HPE VME hypervisor certification and support for native data protection

¹ Zerto integration with HPE VM Essentials on roadmap for H2 2025



HPE will be the only provider with a Full hybrid cloud stack

		 Hewlett Packard Enterprise	 vmware	 NUTANIX	 Red Hat	 Microsoft	 aws
Runtimes	Hypervisor	HPE VME	ESXi	AHV	OSV	Hyper-V	KVM/ / Nitro
	Containers	HPE K8s	Tanzu	Nutanix K8s Engine	OpenShift	AKS	EKS
Data Management	Storage	HPE Alletra	vSAN	AOS	Gluster / Ceph	Storage Spaces Direct	EBS/S3/EFS
	Data Protection	Zerto	Live Recovery	DP & DR	OS Data Foundation	Azure Site Recovery	AWS Backup, DRS
Network		HPE Networking	NSX Networking	Flow	Ovirtmgmt/ OS SDN	Windows Server SDN	AWS VPC
IT Ops Management		OpsRamp	Aria Operations	Epoch, Prism Pro, NCM	OpenShift Observability	Azure Monitor	AWS CloudWatch
Cloud Management		Morpheus	Morpheus	Morpheus	(Morpheus)	Morpheus	Morpheus
Multi-vendor, multi-cloud		✓	✗	✗	✗	✗	✗
Fully integrated HW/SW		✓	✗	✗	✗	Public Cloud only	Public Cloud only
E2E Enterprise services		✓	✗	✗	✗	✗	✗



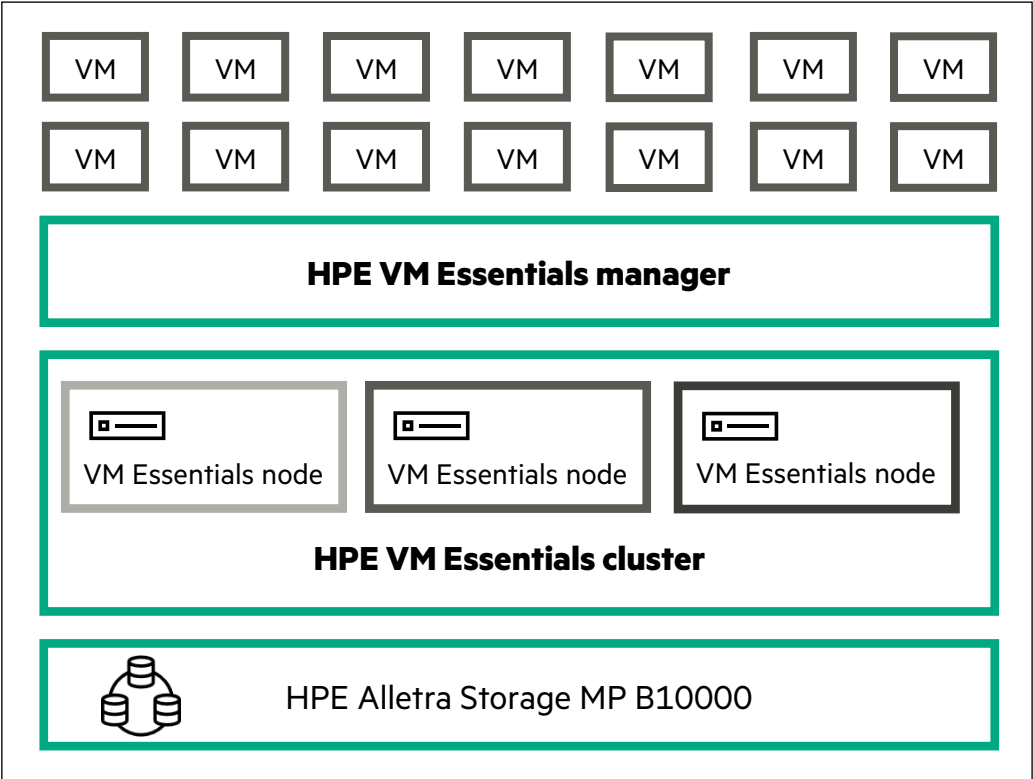
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HPE Morpheus VM Essentials
HPE Morpheus Enterprise

Architecture of HPE VM Essentials (VME)

The relationship between HPE VM Essentials and other components of the solution



STORAGE OVERVIEW

- **Local**

- Locally attached hard drives in each of the physical hosts.

- **NFS**

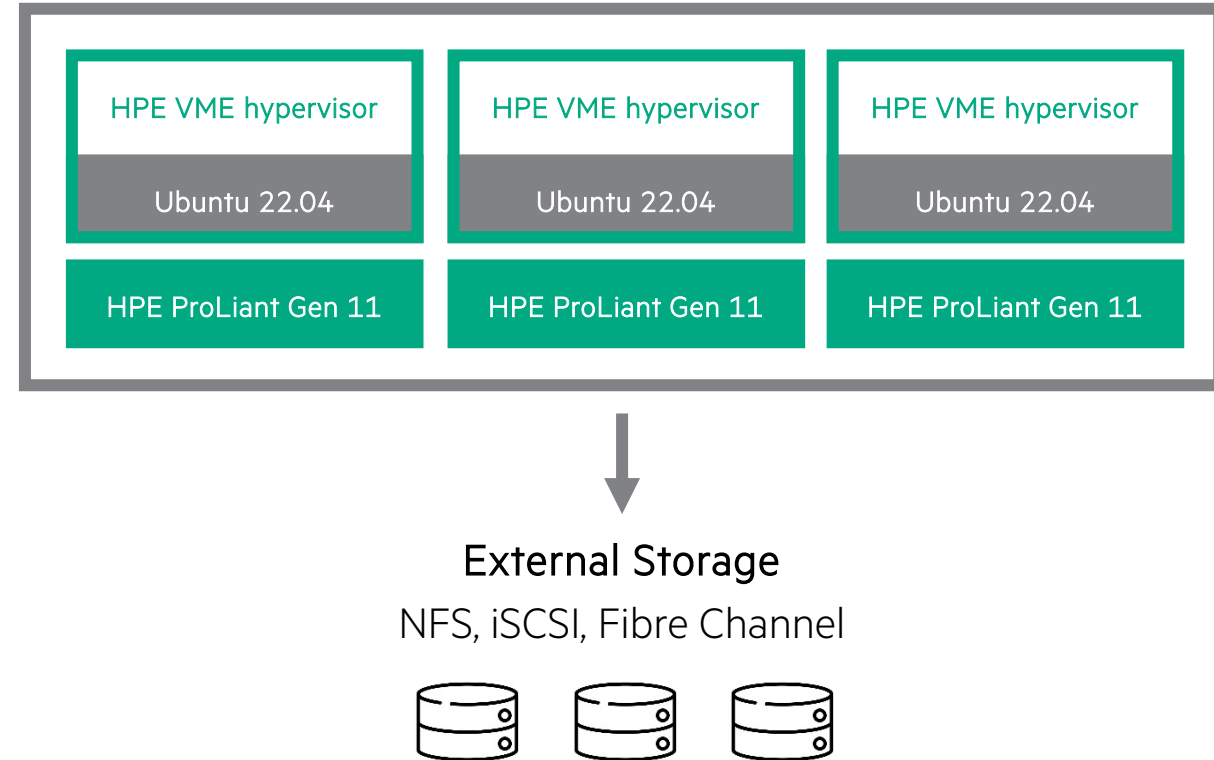
- Integrate with existing networked storage via the Network File System (NFS) protocol.

- **iSCSI**

- Integrate with existing networked storage via the Internet Small Computer Systems Interface (iSCSI) storage protocol.

- **Fibre Channel**

- Integrate with existing networked storage via the Fibre Channel (FC) storage protocol.



×



HPE VM ESSENTIALS 8.0.6 ANY WHERE

- **Standalone** just as an other Hypervisor
- Use your own servers and storage
- With or without the full stack Morpheus to manage our existing VM what ever they run
- Available from Dec, 20th in US
- Available from Feb, 15th in EMEA

- **Bundle** with infrastructure **PCBE MP**
- 100% data availability Guarantee
- Value PCBE cloud console
 - Unify your VM management
 - Vmware, VME, Azure, AWS
 - HCI like with one click update
 - Cross stack reports
 - From VM to Back-End disk array

- **Bundle** with infrastructure **Simplivity**
- Start as small as 1 nodes
- HA from a 2 nodes solution
- Offer stretch cluster from start
- Manageable from local to cloud with PCBE and local console



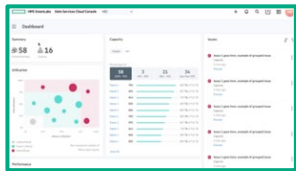
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HPE VM VENDING MACHINES OVERVIEW

The industry’s broadest and deepest flash portfolio

HPE Private Cloud Business Edition (PCBE)



HPE SimpliVity

Enterprise HCI infrastructure



Alletra Storage dHCI

Disaggregated enterprise hyper converged infrastructure (dHCI)



PCBE Alletra MP



**Hewlett Packard Enterprise**

**vmware**
by Broadcom

VM Essentials

ESXi

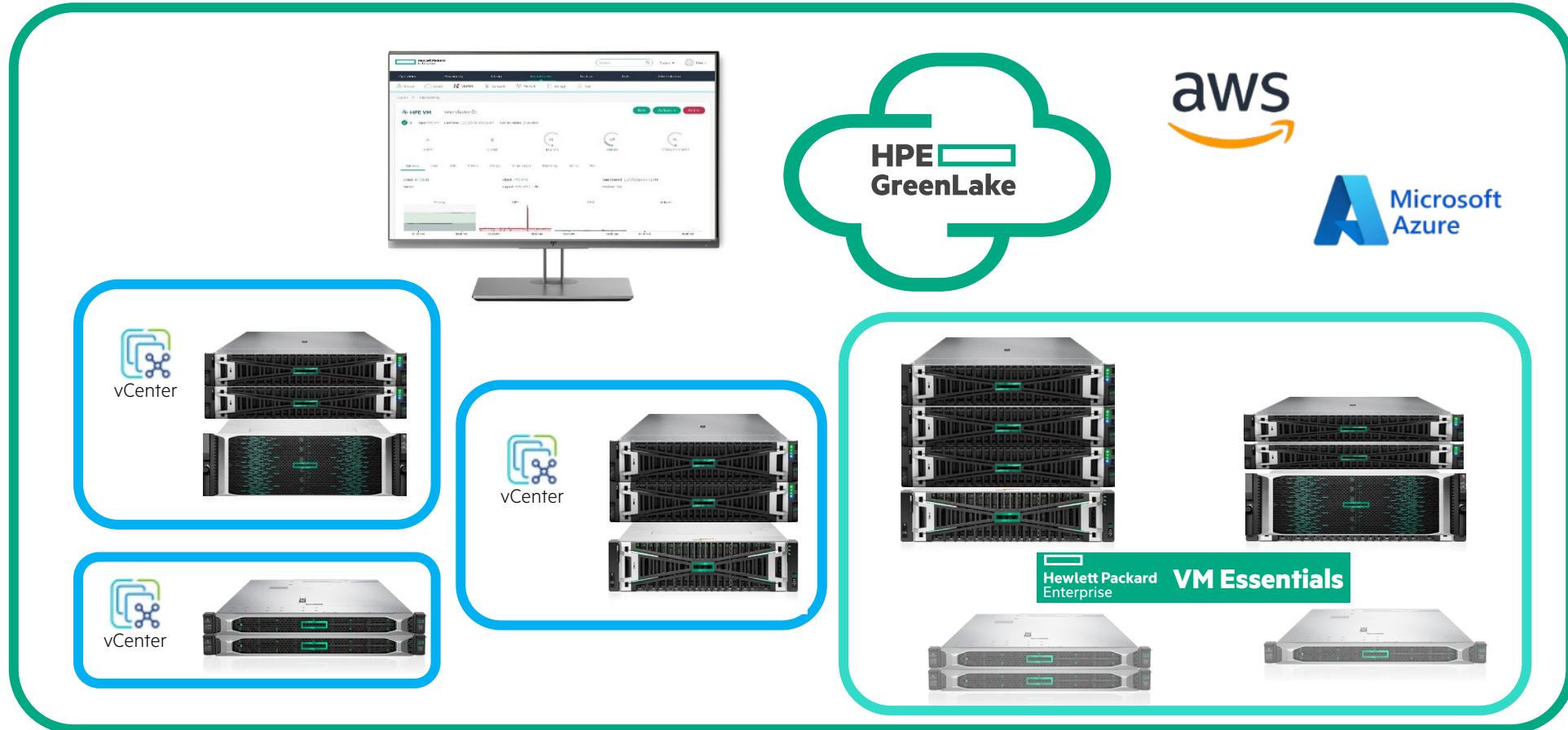


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Private Cloud Business Edition (PCBE)

- PCBE is a VM universal console
- Users can manage multiple VM infrastructures (PCBE MP, dHCI, SimpliVity, Azure, AWS) globally.
- Hypervisor can be VMware, HPE VME, Azure or AWS (today)



×



Private Cloud Business Edition (PCBE) Management console functionality

- **Setup Service**
 - Deploy full cluster systems
- **Global Dashboard**
 - View top usage, utilization and status
- **Systems**
 - Detailed system view
 - Global lifecycle management
 - Configuration checks
 - Provision datastores
 - Deploy additional vSphere clusters through multi-cluster support
 - Migrate VMs
- **Virtual machines**
 - Deploy and manage on-premises and public cloud virtual machines
 - Migrate on-premises virtual machines within a vCenter environment
- **Cloud accounts**
 - Add and manage public cloud accounts
- **VM provisioning policies**
 - Configure provisioning policies to set storage characteristics and apply HPE GreenLake for Backup and Recovery protection policies during VM creation



SINGLE CLICK UPDATE

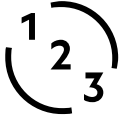
- Cloud initiated and orchestrated update of the virtualization stack
 - HPE Alletra MP B10000 array OS
 - iLO firmware
 - SPP
 - VM Essentials manager
 - HVM hypervisor and host OS
 - ESXi
 - Switch firmware (if Network Automation feature used)
- None disruptive
- Fully automated
 - If DRS not enabled on a vSphere cluster, manual migration from host to host is necessary
- Software catalogs fully validated
 - Only valid update paths with compatible versions provided
- Cloud AI driven allow/deny list ensures stack won't be allowed to update if a potential issue could be encountered



×



Architectural principles for simplifying operations



Simple to deploy

from rack to production apps



Simple to manage

VM-centric data services using familiar tools and powered by intuitive cloud operating experience



Simple to scale

Autodiscover new resources and grow transparently



Simple to support

Predictive full-stack support with AIOps



Simple to protect and resilient

Choice of Six-nines or Five-nines data availability with built-in data protection



Simple for multicloud

Single console for on-prem and cloud VMs




Simple to upgrade


Built-in intelligent lifecycle management using AIOps for a one-click upgrade

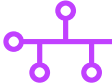


HPE Private Cloud Business Edition (PCBE) with Alletra MP B10000




Full-stack AI-Ops






Network

2x validated 10/25/100 GbE network switches
Through HPE: Aruba, M-Series, FlexFabric
-or- Bring-Your-Own-Switches





Management


HPE GreenLake for Private Cloud Business Edition Cloud console



Hypervisor


 or 

VM Essentials




Compute

HPE ProLiant DL servers (AMD or Intel)




Storage




HPE GreenLake Storage for Block (Alletra MP)




Connectivity


Data Services Connector virtual machine

 optional

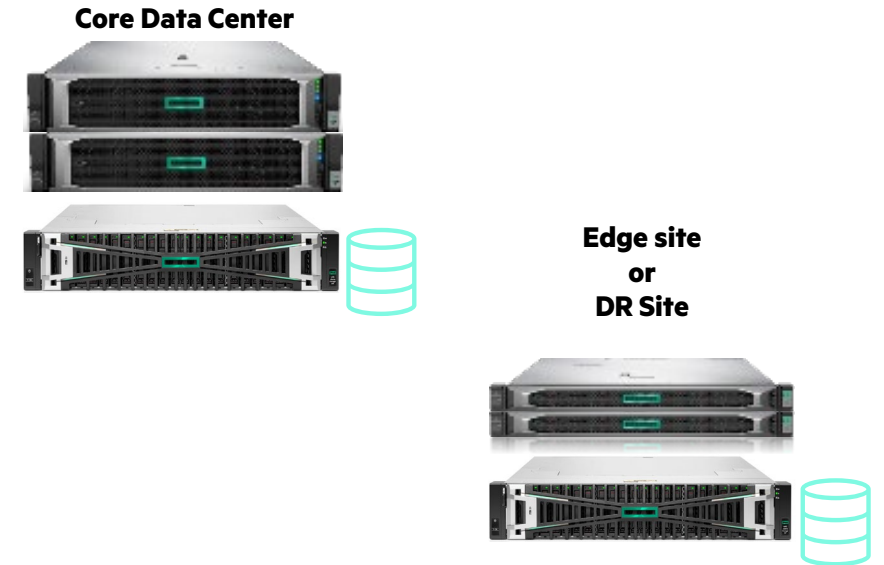


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Seven reasons customers choose HPE PCBE MP

- 1 Most granular scalability for compute & Storage**
Compute by single node and Storage by dual NVMe SSD
- 2 Start Small**
As small as 3-node HA and 8 NVMe SSD with a one click upgrade
- 3 Space efficient**
StoreMore Guarantee
- 4 Highly Available**
100% Data Availability & Cyber Resilience Guarantee
- 5 Admin from anywhere securely**
Centrally manage from PCBE
- 6 Intelligent AI operations**
Predictive analytics, support automation
- 7 Full integration with most of Backup* Software**
Backup can be immutable at source with Virtual Lock Snapshot.



HPE PCBE MP
100% Data Availability HCI

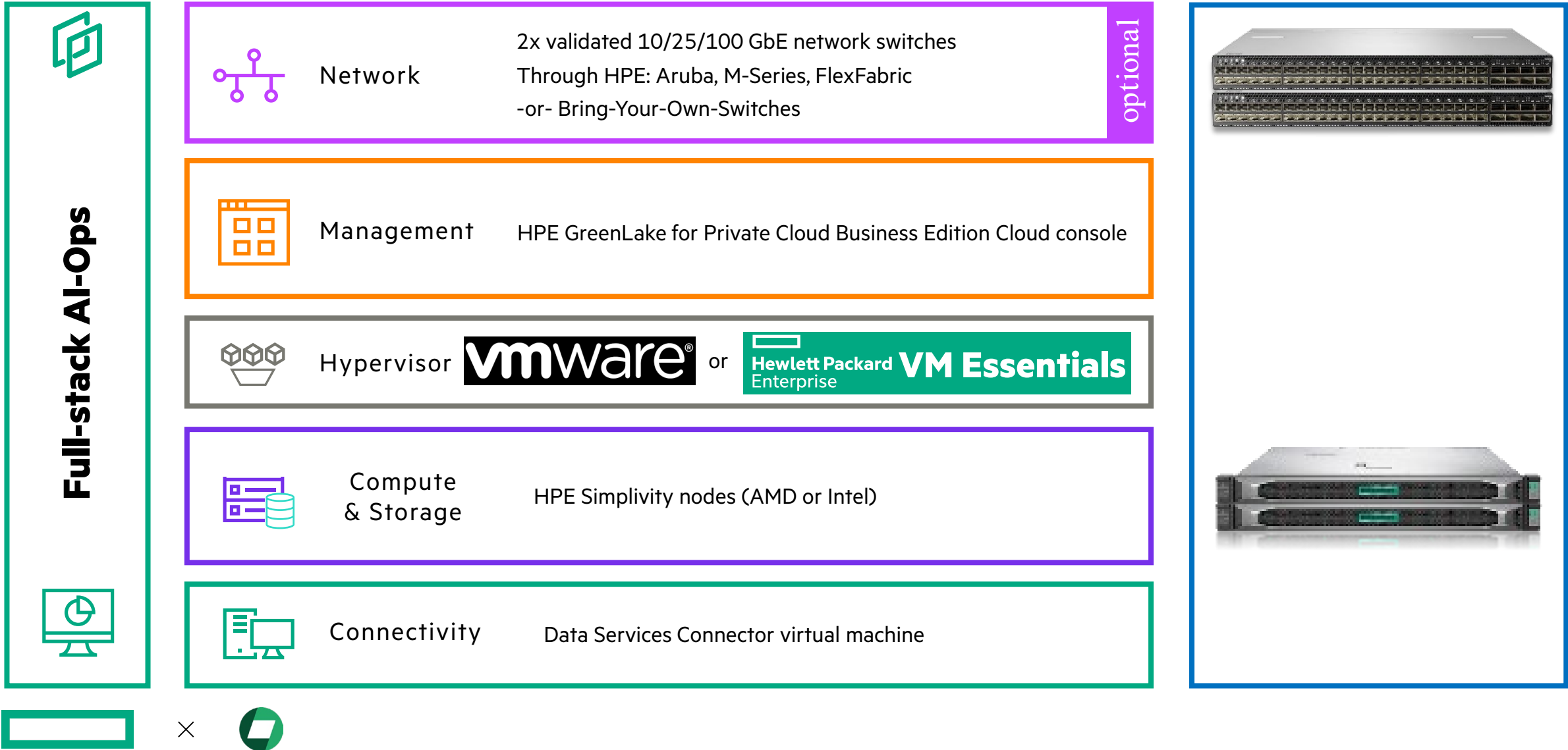


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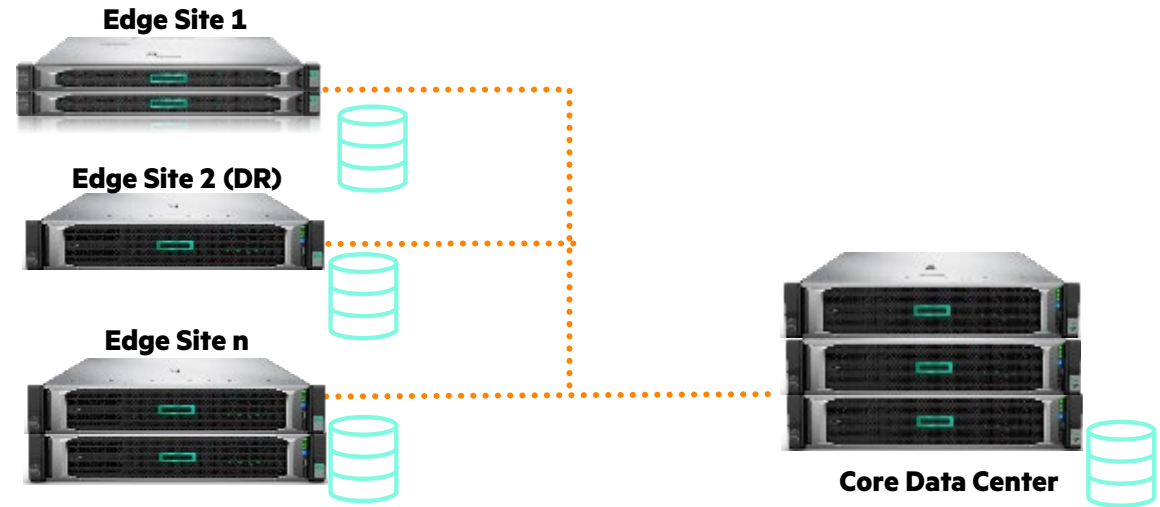
* Veeam, Commvault, NetBackup,...

HPE Private Cloud Business Edition (PBCE) with SimpliVity



Seven reasons customers choose HPE SimpliVity

- 1 Can start with only one node**
Data protected by hardware Raid 5 or 6 (DP)
- 2 Most efficient, all-in-one solution**
As small as 2-node HA, security and data services
- 3 Always online and recoverable**
Built-in backup (up to cloud) and DR
- 4 Efficiency at the edge**
Optimized for 10:1 data reduction
- 5 No edge site admin required**
Centrally manage all distributed clouds
- 6 Intelligent AI operations**
Predictive analytics, support automation
- 7 Backup & Restore build in**
Backup can be immutable and local restore of a 1TB VM is under 60sec



HPE SimpliVity
intelligent HCI for the edge



×



Simplified management with PCBE

Simple.
Resilient.
Efficient.



Agile Self-Service Edge-to-Cloud Console



Cloud Setup*



Realtime Global Dashboard



Monitor and manage* systems



Non-disruptive, remote full stack updates*



Deploy, manage & protect on prem and public cloud VMs

*Upcoming for HPE SimpliVity
Setup and Update for HPE SimpliVity will leverage existing tools

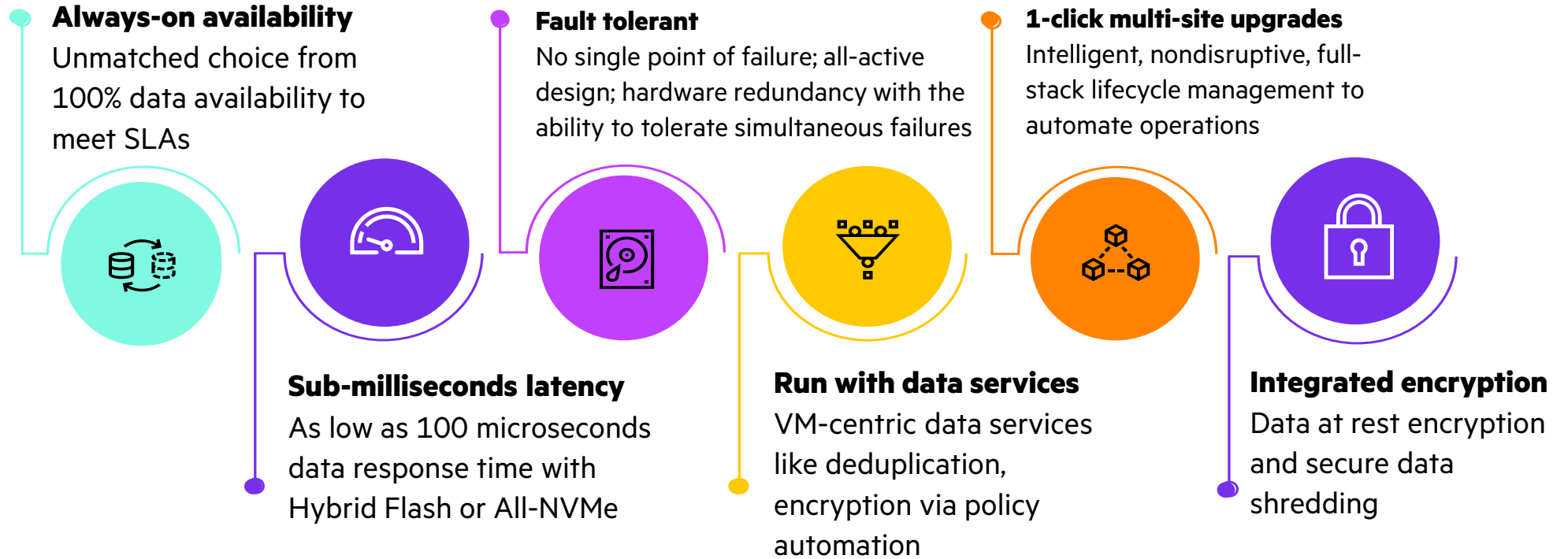


×



Built for resilience and speed

Simple.
Resilient.
Efficient.



×



HPE GreenLake for Private Cloud Business Edition (PCBE)

Simple.
Resilient.
Efficient.

One

Simple, unified console
with self-managed
operations, automation

Efficiently scalable

Saves cost by scaling
what you need without
over provisioning

Expert Support with AIOps

Reduces time spent fire
fighting and frees
resources

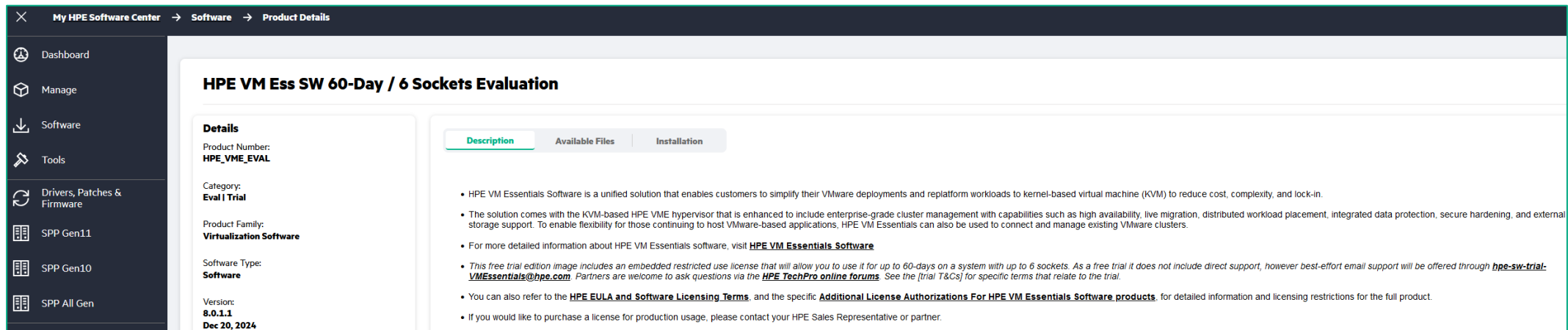


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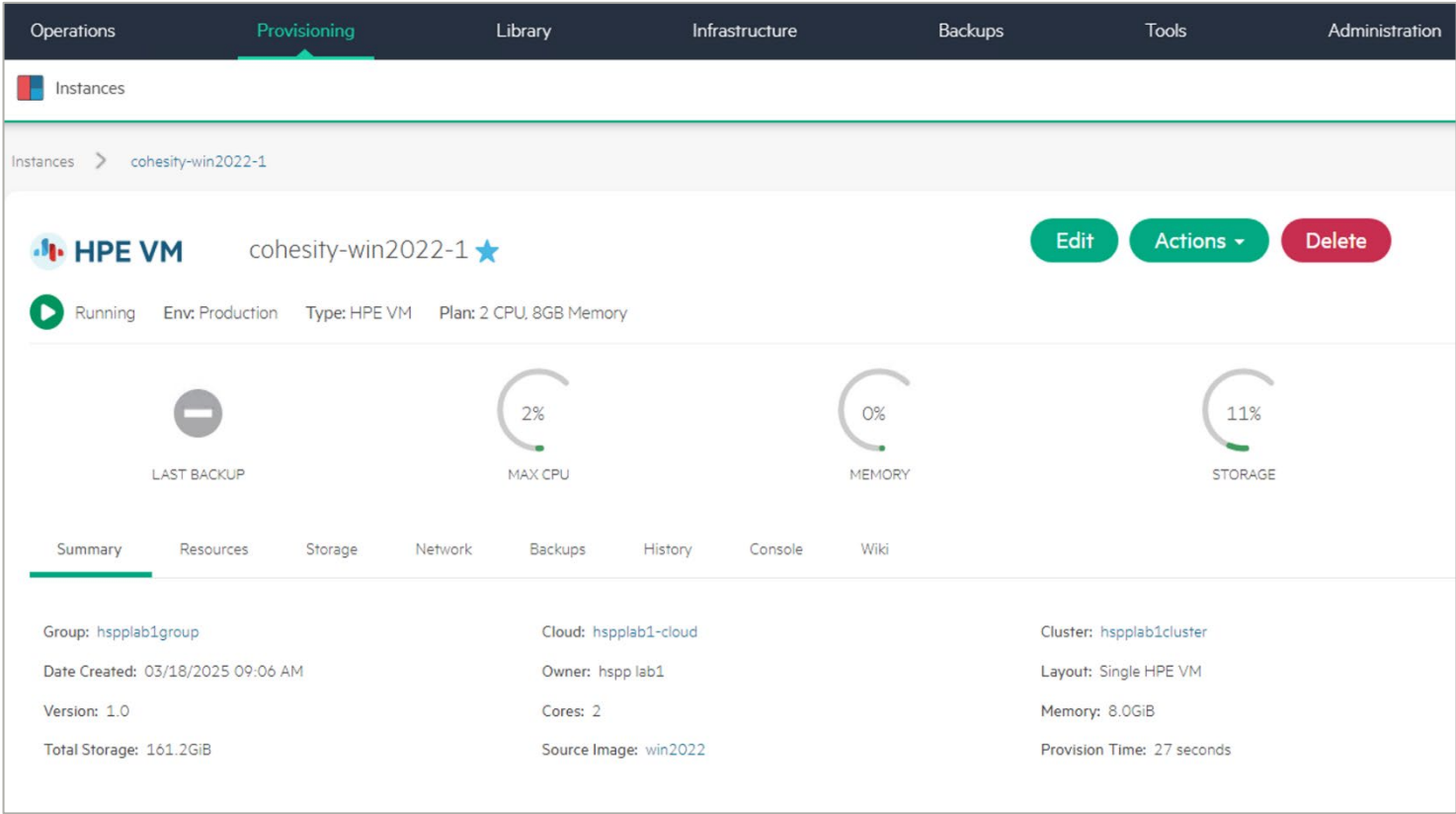


HPE VME Trial licenses

- HPE VM Essentials software download include a default trial period
 - Download VME from: <https://myenterpriselicense.hpe.com>
 - Support for up to 6 sockets
 - 60-day trial term
- Documentation: <https://hpevm-docs.morpheusdata.com/en/latest/index.html>
- Direct support not included
 - Best effort via engagement in the Tech Pro slack channels
 - <https://techpro.hpe.com/custom.aspx?page=COMMUNITIES>
 - #solutions-virtualization-external for partners



HPE VM Essentials (VME) — DEMO



But be please to come on HPE boost to get another demo and more.



Environment

1
Groups

2
Clouds

1
Clusters

0
Apps

5
Instances

14
Users

System Status



CPU



Memory



Storage



Database



Queues



Search

☆ Favorites

INSTANCE

MyDemo-Dylan

TYPE

HPE VM

ADDRESS

10.6.122.57

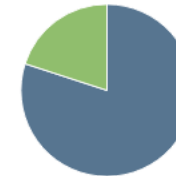
Instance Status

5
Instances



Instances By Cloud

2
Clouds

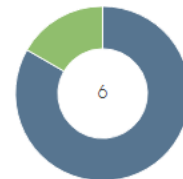


Group Workloads



allclouds

Cloud Workloads



CIC VME Cloud
CIC VMware Cloud

Cluster Workloads



CIC VME Cluster

Backups

1 Day 1 Week 1 Month

Successful

0

Task Executions

1 Day 1 Week 1 Month

Successful

0

Search for Community Discussions and Knowledge

All Community



1820408 Members 3365 Online 109624 Solutions

Forums ▾ Blogs ▾ Information ▾ Community Language ▾

New Discussion 

Log In









HPE VM Essentials

Manage existing virtualized workloads, re-platform to the HPE VME hypervisor, and experience a simple VM-vending experience across both stacks

New Discussion 

Forum Options ▾



	SUBJECT	REPLIES	AUTHOR	RATING	VIEWS	LATEST POST
	HPE VM Essentials 8.0.5 is out  	0	CalvinZito		82	Tuesday by CalvinZito
	Welcome to the HPE VM Essentials Forum! 	7	CalvinZito		1106	4 weeks ago by CalvinZito
	HPE VM Essentials Setup – Storage and Network Conf...	1	abhivintech		80	yesterday by Arnout Verbeken
	Issue while creating a windows 11 server edition v...	3	abhivintech		105	yesterday by PSPrakash
	✓ Best way to do in-place upgrade from 8.0.4 to 8.0....	5	olnoh		205	yesterday by shiba9967

Search

Search recent activities

Type

User

Date Range

All Types ▾

All Users ▾

All Dates ▾

RECENT ACTIVITY REPORT

ALL TYPES, ALL USERS, ALL DATES



Alert - TestCGP001
Instance has successfully been deleted by 'cic-geneva'.
04/23/2025 01:00 AM Author: garnier

04/22/2025



Alert - TestCGP001
Server has successfully been deleted by 'cic-geneva'.
04/23/2025 01:00 AM

04/22/2025



Alert - Test OB on ESX
Instance has successfully been deleted by 'cic-geneva'.
04/22/2025 11:00 PM Author: garnier

04/22/2025

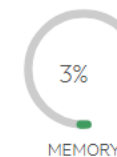
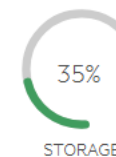
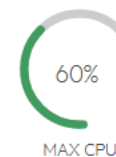
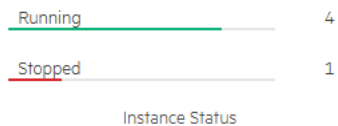
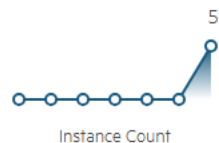


Alert - Test OB on ESX
Server has successfully been deleted by 'cic-geneva'.
04/22/2025 11:00 PM

04/22/2025

04/22/2025





INSTANCES

Search



All Groups



All Clouds



All Statuses



+ Add

Actions



NAME



SUMMARY

LOCATION

STATS



CIC_Demo



IP addr: 10.6.123.52
IP addr: 10.6.123.50
Version: 1.0
Virtual Machines: 2

Group: allclouds
Cluster: CIC VME Cluster



STATUS



MAX CPU



CIC_VMware_VM_to_migrate



IP addr: 10.4.27.233
Version: 1.0
Virtual Machines: 1

Group: allclouds
Clouds: CIC VMware Cloud
Region:



STATUS



MAX CPU



eCommerceApp



IP addr: 10.6.122.51
Version: 1.0
Virtual Machines: 1

Group: allclouds
Cluster: CIC VME Cluster



STATUS



MAX CPU



MEMORY



STORAGE



MyDemo-Dylan



IP addr: 10.6.122.57
Version: 1.0

Group: allclouds
Cluster: CIC VME Cluster



STATUS



MAX CPU



MEMORY



STORAGE

- Stop Server
- Start Server
- Restart Server
- Suspend
- Stop Service
- Start Service
- Restart Service
- Open Console
- Backup
- Delete



No Bucket or File Share configured as the default image storage location. Images will be saved locally on the appliance and may have limited storage.

Search



All Types















User



Labels



TYPE	NAME	PLATFORM	LABELS	SIZE	SOURCE	STATUS
	CIC_VMware_image	 ubuntu 64-bit		1.3GIB	UPLOADED	Active
	Debian 12	 debian 12 64-bit		418.9MIB	UPLOADED	Active
	Fedora 41	 fedora 64-bit		468.9MIB	UPLOADED	Active
	kube_node	 debian 12 64-bit		N/A	UPLOADED	Active
	MyDemolmage	 ubuntu 64-bit		1.3GIB	UPLOADED	Active
	Rocky Linux 9	 Rocky Linux 9 64-bit		581.6MIB	UPLOADED	Active





Groups



Clouds



Clusters



Compute



Network



Storage



Trust



GROUPS

Search



Labels



NAME



LOCATION

LABELS

CLOUDS

INSTANCES

HOSTS

VMS

BARE METAL

allclouds

2

5

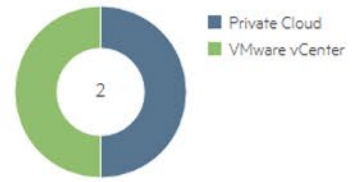
4

12

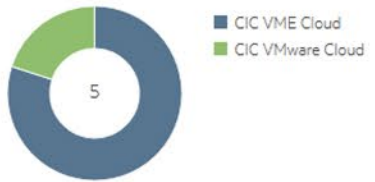
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Cloud Types



Cloud Workloads



CLOUDS

Search  All  Select Type  Labels 

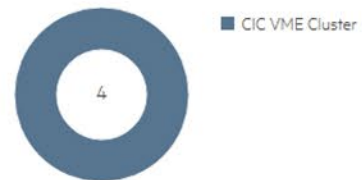


TYPE	NAME	LABELS	HOSTS	VMS	BARE METAL	STATUS
	CIC VME Cloud		3	10	0	OK
	CIC VMware Cloud		1	1	0	OK

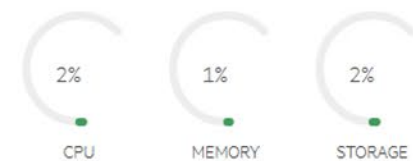
Cluster Types



Cluster Workloads





Cluster Capacity



















CLUSTERS

Search  Labels  All Types 



STATUS	TYPE	NAME	LAYOUT	WORKERS	COMPUTE	MEMORY	STORAGE
	 HPE VM	CIC VME Cluster	HPE VM 1.1 Cluster on Existing Ubuntu 22.04	3	0	1	2

<input type="checkbox"/>	POWER	OS	NAME	TYPE	CLOUD	IP ADDRESS	COMPUTE	MEMORY	STORAGE	STATUS
<input type="checkbox"/>			10.3.61.18		CIC VMware Cloud		6	50	17	
<input type="checkbox"/>			vme1		CIC VME Cloud	Address 10.6.121.11	0	1	2	
<input type="checkbox"/>			vme2		CIC VME Cloud	Address 10.6.121.12	0	1	2	
<input type="checkbox"/>			vme3		CIC VME Cloud	Address 10.6.121.13	1	0	1	

NETWORKS

Networks

Network Groups

Routers

IP Pools

Floating IPs

Domains

Proxies

Integrations

Search



Labels



All Clouds



All Types



STATUS

NAME

LABELS

TYPE

GROUP

CLOUD

IPv4 CIDR

POOL

DHCP



Compute VLAN 1122

OVS Port Group

Shared

CIC VME Cloud

10.6.122.0/24

dmz-1122-pool



Compute VLAN 1123

OVS Port Group

Shared

CIC VME Cloud

10.6.123.0/24

dmz-1123-pool



DPG_DMZ_1357_Morpheus

Distributed Switch Group

Shared

CIC VMware Cloud

10.4.27.192/26

dmz-1357-pool



dvPortGroup_VLAN62

Distributed Switch Group

Shared

CIC VMware Cloud



dvSwitch_Provisi-DVUplinks-8

Distributed Switch Group

Shared

CIC VMware Cloud



Management

OVS Bridge

Shared

CIC VME Cloud

10.6.121.12/24



NR_2026_ISCSI_NIMBLE

Distributed Switch Group

Shared

CIC VMware Cloud



VM Network

VMware Network

Shared

CIC VMware Cloud



STORAGE

Buckets

File Shares

Volumes

Data Stores

Servers

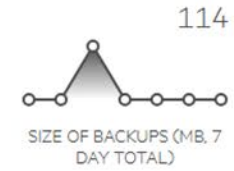
DATA STORES

Search



NAME	TYPE	CLOUD	CAPACITY
allettra-mp-01	Generic	CIC VME Cloud	751.7GiB
default	Directory Pool	CIC VME Cloud	44.0GiB
local	Directory Pool	CIC VME Cloud	44.0GiB
morpheus-cloud-init	Directory Pool	CIC VME Cloud	44.0GiB
morpheus-images	Directory Pool	CIC VME Cloud	44.0GiB
Nimble-HIT-Provisioning-1	Vmfs	CIC VMware Cloud	3.7TiB
Nimble-HIT-Provisioning-2	Vmfs	CIC VMware Cloud	3.7TiB
P7200-Prod-VMSTORE1	Vmfs	CIC VMware Cloud	2.6TiB

No [Bucket](#) or [File Share](#) configured as the default backup storage location. Backups will be saved locally on the appliance and may have limited storage.



UPCOMING / IN PROGRESS

🗄️ Morpheus Appliance

Starts: 05/04/2025 02:00 AM

BACKUP JOBS

Search



+ Add ▾

Provider	Name	Schedule	Next	Retention Count	Backup Count	
Internal	Backup Job1	Daily at Midnight	05/02/2025 02:00 AM	1	0	ACTIONS ▾
Internal	dlgdemo				1	ACTIONS ▾
Internal	Job recurrente ED	Daily at Midnight	05/02/2025 02:00 AM		0	ACTIONS ▾
Internal	Morpheus Appliance	Weekly on Sunday at Midnight	05/04/2025 02:00 AM	10	1	ACTIONS ▾



No [Bucket](#) or [File Share](#) configured as the default backup storage location. Backups will be saved locally on the appliance and may have limited storage.

BACKUP LIST

Search



Last Status

Type

+ Add

dlgdemo

Job: [dlgdemo](#)

Type: KVM VM Snapshot

Duration: -



Morpheus Appliance

Job: [Morpheus Appliance](#)

Latest: 04/27/2025 02:00 AM

Next: 05/04/2025 02:00 AM

Duration: 00:00:36

Type: Morpheus Appliance





Morpheus Health

Morpheus Logs

Health Summary



Overall



CPU



Memory



Storage



Database

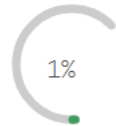


Elastic

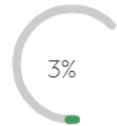


Queue

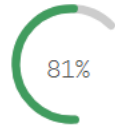
HEALTH LEVELS



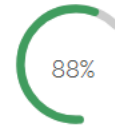
MORPHEUS CPU



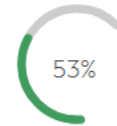
SYSTEM CPU



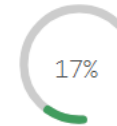
MORPHEUS MEMORY



SYSTEM MEMORY



USED SWAP



STORAGE

CPU

Processor Count: 4

System CPU: 2.69%

Process Time: 7 days

System Load: 0.036

Morpheus CPU: 0.80%

MEMORY

Morpheus Memory: 3.9GiB

Morpheus Memory Usage: 80.96%

System Free Memory: 1.8GiB

Free Swap: 1.0GiB

Morpheus Used Memory: 3.1GiB

System Memory: 15.5GiB

System Memory Usage: 88.25%

Morpheus Free Memory: 758.0MiB

System Used Memory: 6.9GiB

System Swap: 4.0GiB

CREATE INSTANCE



Type



Group



Configure



Automation



Review



VM BITF

allclouds (CIC VME Cloud)

Summary

Instance Options

NAME: VM BITF
GROUP: allclouds
CLOUD: CIC VME Cloud
TYPE: HPE VM
PLAN: 2 CPU, 16GB Memory
Cores: 2 Memory: 16GB
VERSION: 1.0
LAYOUT: Single HPE VM

Volumes

ROOT: 160 GB (Standard) Auto - Datastore

Networks

COMPUTE VLAN 1122: dmz-1122-pool

Options

Previous

Complete

NAME

CIC_Demo



Virtual Machines: 2

CIC_VMware_VM_to_migrate



IP addr: 10.4.27.233

Version: 1.0

Virtual Machines: 1

Group: allclouds

Clouds: CIC VMware Cloud

Region:



STATUS

1

MAX CPU

5

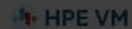
MEMORY

0

STORAGE

digdemo

Test



IP addr: 10.6.122.52

Version: 1.0

Virtual Machines: 1

Group: allclouds

Cluster: CIC VME Cluster



STATUS

0

MAX CPU

14

MEMORY

31

STORAGE

eCommerceApp

IP addr: 10.6.122.51

Version: 1.0

Group: allclouds

Cluster: CIC VME Cluster



STATUS

25

MAX CPU

3

MEMORY

6

STORAGE



Atelier HPE VME Discovery : Alternative Virtualization.

Workshop d'une 1/2 journée pour comprendre les tenants et les aboutissants de cette alternative à l'infrastructure dite « traditionnelle » ainsi que les points d'attentions et avantages d'un tel changement.

- **Contenu :**

- Comparaison des options de stockage traditionnel, HCI et Cloud Hybride et discussion sur le plan de virtualisation alternatif avec HPE VM Essentials
- Concepts : stack des usages
- Présentation de la solution HPE VM Essentials
- Environnement et compatibilités
- Avantages et inconvénients
- Gartner
- Next Steps
- Vos questions

- **Ce workshop inclut :**

- Préparation
- 1 heure de séance de kick-off pour le cadrage du périmètre et le choix des participants
- 1 demi-journée d'atelier sur site et extraction de l'environnement client avec l'outil HPE pour validation
- 1 heure de séance pour la présentation d'un rapport synthétique incluant le résultat de la validation et les conclusions de l'atelier



Merci!

Des questions ? Contactez-nous :
it-forum.ch@bechtle.com

