

Overview

Shape the Future of QuickSpecs – Your Input Matters

HPE Private Cloud Business Edition

HPE Private Cloud Business Edition provides an agile cloud operational experience and a simple cloud consumption model for private cloud infrastructure. With this offering, customers can build their self-service cloud on demand and deliver Virtual machines (VMs) across hybrid cloud, when they need it and where they need it in data centers, at the edge, and beyond. HPE Private Cloud Business Edition comes with HPE VM Essentials and has the ability to manage virtual infrastructure based on VMware and/or VME.

HPE Private Cloud Business Edition with HPE Morpheus VM Essentials Software

HPE Private Cloud Business Edition (PCBE) now supports HPE Morpheus VM Essentials Software and is a cost-effective virtualization solution that is fully integrated into PCBE with Alletra MP B10000 to support your virtualization environment. It includes a KVM-based hypervisor that supports multiple types of storage, distributed workload placement, high availability (HA), live migration, data protection via snapshots and backups. The unified management suite allows administrators to manage both one VMware cluster and one VM Essentials hypervisor from a single interface, simplifying the provisioning and management of VMs, clusters, and HA. Additionally, VM Essentials offers enterprise-class global support and a future-proof upgrade path to HPE Morpheus Enterprise Software that includes hybrid-cloud management, Kubernetes support, governance, and FinOps capabilities. This solution provides operational efficiency and simplicity for virtualized environments, making it an ideal choice for organizations looking to optimize their IT infrastructure.

HPE Private Cloud Business Edition at Equinix

HPE Private Cloud Business Edition at Equinix is an alternate route-to-market extension to our standard offering. It provides a deployment option that further simplifies the user experience by leveraging the benefits and value of a colocation environment. It increases the speed and agility of the HPE Private Cloud Business Edition offering while further abstracting the complexity associated with data center deployments.

At A Glance

HPE Private Cloud Business Edition changes the way customers procure and manage VMs with a cloud operational experience. HPE Private Cloud Business Edition helps eliminate complexity with a unified cloud service for VM to infrastructure management, including public cloud VMs. The solution—delivered on-prem and through the Data Services Cloud Console—enables global unified management and monitoring of VMs and infrastructure deployed at any location as well as 1-click, multisite upgrades. This enables IT to reduce operating costs while helping optimize resource utilization, move to a generalist model, and shift from managing infrastructure to managing VMs and data, thereby refocusing resources and skills on higher-value strategic initiatives. The VM-based cloud offering brings the agility of cloud operations and the ease of cloud ownership to apps and data everywhere. Shift from traditional VM and infrastructure ownership to flexibly consume hybrid cloud VMs with predictable monthly costs. This simplified private cloud solution empowers customers to transform from IT operator to service provider while focusing on accelerating outcomes and not infrastructure management. With this service, customers can:

- Experience faster self-service agility with cloud management to accelerate deployments.
- Manage VMs across hybrid cloud seamlessly on demand.
- Deploy, manage, upgrade, and optimize your entire VM fleet globally from any location or device.
- Choose between HPE Morpheus VM Essentials, VMware, or a combination of both (requires separate hosts and virtualization clusters).



Overview

HPE Private Cloud Business Edition lets customers and partners choose a platform that suits their application and infrastructure needs. It works with HPE Alletra Storage MP B10000 and HPE SimpliVity hyperconverged solutions.

HPE Private Cloud Business Edition is also available in two consumption models, Pay-upfront and Pay-as-you-go (IaaS).

The management, features and functionalities remain consistent regardless of the selected consumption model.

What's New

- **HPE Private Cloud Business Edition includes HPE Morpheus VM Essentials Software**
 - Platform supported: HPE ProLiant Servers Gen 11 & Alletra-MP B10000
 - All Private Cloud Business Edition with Alletra MP will ship with HPE VM Essentials by default
 - Choose between VM Essentials, VMware, or a combination of both (requires separate hosts and virtualization clusters) at the time of deployment.
- **HPE Private Cloud Business Edition at Equinix.**
 - Delivers end-to-end simplified quoting, ordering, and billing of optimized configurations that will be deployed and operationalized within highly reliable, sustainable, and secure Equinix colocation facilities.
 - Eases deployment complexities, power management, cooling considerations, floor & rack space management, and upgrade concerns associated with the creation of a private cloud.
 - Supplies pre-configured Smart Templates for quoting and ordering simplicity.
 - Provides monthly billing aligned to the combined value of the HPE Private Cloud Business Edition solution and the Equinix ecosystem.

Category	HPE Private Cloud Business Edition with VMware	HPE Private Cloud Business Edition with HPE Morpheus VM Essentials Software
Platform	• Server support: HPE ProLiant Gen11, Gen10 Plus servers • Intel-based HPE ProLiant DL360, HPE ProLiant DL380 • AMD-based HPE ProLiant DL325, HPE ProLiant DL365, HPE ProLiant DL385 • Intel-based HPE ProLiant DL360, HPE ProLiant DL380 • Storage support: HPE Alletra-MP B10000 Storage, Alletra 5000, Alletra 6000	• Server support: HPE ProLiant Gen11 • Intel-based HPE ProLiant DL360, HPE ProLiant DL380 • AMD-based HPE ProLiant DL325, HPE ProLiant DL365, HPE ProLiant DL385 • Storage support: HPE Alletra-MP B10000 Storage
Manageability	• Setup and lifecycle management (single-click upgrades) • Configurations checker • VM management through the on-prem VME Manager	• Setup and lifecycle management (single-click upgrades) • Configurations checker • VM management through the on-prem VME Manager
Analytics & Monitoring	Cluster and VM capacity and performance, storage health status information	Cluster and VM capacity and performance, storage health status information
Support	HPE Services and Support	HPE Services and Support

Notes:

- New (greenfield) and existing (brownfield) HPE ProLiant servers are supported with HPE Private Cloud Business Edition.
- iSCSI support only. FC and NVMeOF are not currently supported with HPE Private Cloud Business Edition
- Alletra 5k/6k platforms are not supported initially with HPE Private Cloud Business Edition with VM Essentials.



Overview

Key Features and Benefits

The latest key feature adds HPE VM Essentials Software as a supported hypervisor management platform for Private Cloud Business Edition with Alletra Storage MP B10000 systems. You can now deploy one of the available hypervisor runtimes: VM Essentials manager: Use the HPE Morpheus VM Essentials Manager Software UI to manage servers, clusters, datastores, and virtual machines. For systems deployed with this configuration, you can use the Private Cloud Business Edition to monitor systems, but the following features are not supported within the Private Cloud Business Edition UI: Datastore management, VM management, cluster management, server management, and peer persistence with VME clusters. vCenter Server: Systems deployed with this configuration require that you upload your own ESXi Image to a designated datastore for setup to complete deployment of VMware ESXi clusters. For more Information, see: HPE Private Cloud Business Edition with Alletra Storage MP B10000: **Deployment** guide for new Installations.

The core feature set includes:

- Self-service setup: Accelerate agility and speed up deployments. It provides capability for VMware or VM Essentials at deployment
 - Observability: Global dash boarding (VM and Cluster information, capacity details/trends, performance details/trends, alerts).
 - LCM: Full Stack lifecycle management (automated catalogue-based updates of the various hardware, software, and firmware components vetted by HPE experts).
 - Management: On-prem console to provision and manage clusters and VM's
 - Choice of runtime: Provides customer choice of either leveraging VMware or VM Essentials virtualization.
 - Run any application without compromise: All the capabilities of Alletra MP (Data Savings, snapshots. Replication*, snapshot, 100% uptime guarantees, Timeless etc.) applies.
 - Infrastructure Automation & Orchestration: Setup automation & full-stack lifecycle management
 - Future Proof IT: Leverage the same HW infrastructure to run multiple virtualization technologies.
- Notes: (Servers needs to be dedicated to the respective hypervisor clusters)**
- Experience simplified virtualization: Provision & manage multiple hypervisor clusters (on-prem VME console)
 - Built-in Image Conversion: Built-in VM image conversion for easy movement of VMs across hypervisor clusters
 - Network automation: Ability to setup supported network switches during the setup phase eliminating manual configurations and network related complexities.
 - Lower TCO: Cost Efficient Virtualization platform. 4x to 25x cheaper.

Notes:

- Customer must download and supply their own VMware ESXi and vCenter binaries.
- Peer Persistence is supported with HPE Private Cloud Business Edition with VMware only.
- There are no differences in features and functionality between the standalone VM Essentials version and bundled VM Essentials version with HPE Private Cloud Business Edition. Additional detailed information for VM Essentials can be found at the following URL: https://www.hpe.com/psnow/doc/a50004260enw.pdf?jumpid=in_pdp-psnow-qs
- Release notes with what is currently supported can be found here: <http://www.hpe.com/support/GLPCBEReleaseNotes>

Additional features associated with HPE Private Cloud Business Edition colocation at Equinix include:

- A modern, private cloud experience with visibility and integration across the hybrid cloud without egress fees.
- State-of-the-art hosting facilities and services that are optimized for sustainability, security, and resiliency.
- Pre-deployed infrastructure in dedicated Equinix cages, coupled with leading connectivity and networking services.
- A single, pre-defined HPE GreenLake agreement with consolidated cloud and digital infrastructure services using integrated HPE Units of Measure.
- Unified billing for the entire HPE Private Cloud Business Edition Equinix solution.

All HPE GreenLake services are subject to the terms and conditions of the **HPE GreenLake data sheet**



Service and Support

Support is included as part of the subscription for HPE Private Cloud Business Edition. Included with the support is 24x7 telephone and email support for the arrays and hardware components for the chosen subscription term.

Refer to the HPE Private Cloud Business Edition Data sheet <https://www.hpe.com/psnow/doc/a50009418ENW?ver=2> for the service deliverables and the shared responsibility model as part of the subscription.

Data availability is guaranteed with HPE Alletra Storage.

The Service Level Agreement (SLA): <https://www.hpe.com/psnow/doc/a50003574enw>



Configuration Information

Easy Configuration through Smart Templates for Pay-as-you-go

Fully pre-configured Smart Templates that allow quick and easy quoting exist for:

- HPE Private Cloud Business Edition
- HPE Private Cloud Business Edition for Equinix

Smart Templates for HPE Private Cloud Business Edition are pre-defined systems with storage, compute, and network components tailored for multiple workload types and use cases. Smart Templates are complete systems and do not require additional configuration but support optional customization of components as desired.

The Smart templates contain the following attributes to choose:

Workload Type – All flash (business-critical applications) or Hybrid Flash (general-purpose applications)

Workload Tier –

- HPE Alletra Storage MP B10120 Cost Optimized - Ideal for small/fixed-size general purpose virtualization workloads in ROBO and branch environments.
- HPE Alletra Storage MP B10130 Capacity Optimized - Ideal for large, general-purpose workloads such as data lakes, video surveillance & medical image retention
- HPE Alletra Storage MP B10240 Performance Optimized - Powerful and compact (optimized for \$/IOPS, IOPS/GB). Ideal for compute-intensive workloads that require highly performant storage such as VDI or transactional databases.
- HPE Alletra Storage MP B10140 Scale Optimized - Best-in-class (optimized for performance and scalability). Ideal for enterprise apps or data center consolidation requirements that will grow over time.
- HPE Alletra 5000/HPE Alletra 6000 Performance Optimized Tier - Service Tier for I/O intensive, very-low latency workloads, and bandwidth intensive applications at a given availability level. Most common for Oracle, Microsoft SQL Server, and IBM DB2 based applications
- HPE Alletra 5000/HPE Alletra 6000 Balanced Optimized Tier - Service Offering designed to balance scalable capacity requirements with I/O sensitive, very-low latency workloads at a given availability level.
- HPE Alletra 5000/HPE Alletra 6000 Value Optimized Tier - Service optimized for cost for I/O sensitive, very-low latency workloads at a given availability level.

Tier requirements	All Flash	Hybrid Flash
Cost Optimized HPE Alletra Storage MP B10120	Up to 175K IOPS (read)	n/a
	Up to 65K IOPS (mixed)	n/a
	Up to 4.3GB/s & 1.4GB/s (read & write)	n/a
Capacity Optimized HPE Alletra Storage MP B10130	Up to 320K IOPS (read)	n/a
	Up to 128K IOPS (mixed)	n/a
	Up to 8.2GB/s & 3.1GB/s (read & write)	n/a
Performance Optimized HPE Alletra Storage MP B10240	Up to 400K IOPS (read)	n/a
	Up to 148K IOPS (mixed)	n/a
	Up to 9.4GB/s & 3.9GB/s (read & write)	n/a
Scale Optimized HPE Alletra Storage MP B10140	Up to 735K IOPS (read)	n/a
	Up to 283K IOPS (mixed)	n/a
	Up to 17.7GB/s & 7.6GB/s (read & write)	n/a
Performance Optimized HPE Alletra 5000/ HPE Alletra 6000	Up to 440K IOPS (read)	Up to 120K IOPS (read)
	Up to 200K IOPS (mixed)	Up to 120K IOPS (mixed)
	Up to 9GB/s & 3GB/s (read & write)	Up to 5.0GB/s & 2.0GB/s (read & write)
Balanced Optimized HPE Alletra 5000/HPE Alletra 6000	Up to 200K IOPS (read)	Up to 65K IOPS (read)
	Up to 100K IOPS (mixed)	Up to 60K IOPS (mixed)
	Up to 2GB/s & 2GB/s (read & write)	Up to 1.9GB/s & 1.0GB/s (read & write)



Configuration Information

Tier requirements	All Flash	Hybrid Flash
Value Optimized HPE Alletra 5000/HPE Alletra 6000	Up to 150K IOPS (read) Up to 75K IOPS (mixed) Up to 4GB/s & 1GB/s (read & write)	Up to 20K IOPS (read) Up to 15K IOPS (mixed) Up to 1.0GB/s & 0.3GB/s (read & write)

Notes:

- The performance service level objective includes standard data operations (i.e. UI, Intelligent Autonomous Storage, garbage collection). Event-based data operations (replication, snapshots, hardware upgrade, etc.) are excluded.
- 8k blocks used for IOPS and 256k block used for bandwidth in GB/s for storage performance

1. Storage Capacity Reservation

Workload Tier	Storage Array	Usable Capacity
Cost Optimized	HPE Alletra Storage MP B10120 2-node 8-core	30 TB
Capacity Optimized	HPE Alletra Storage MP B10130 2-node 16-core	162 TB
Scale Optimized	HPE Alletra Storage MP B10140 2-node 32-core	62 TB
Performance Optimized	HPE Alletra Storage MP B10240 4-node 32-core (switched)	191 TB
Value Optimized (HPE Alletra dHCI – All Flash)	HPE Alletra 6030	67 TB
Balance Optimized (HPE Alletra dHCI – All Flash)	HPE Alletra 6050	135 TB
Performance Optimized (HPE Alletra dHCI – All Flash)	HPE Alletra 6070	272 TB
Value Optimized (HPE Alletra dHCI – Hybrid Flash)	HPE Alletra 5010	67 TB
Balance Optimized (HPE Alletra dHCI – Hybrid Flash)	HPE Alletra 5030	169 TB
Performance Optimized (HPE Alletra dHCI – Hybrid Flash)	HPE Alletra 5050	338 TB

Notes:

- Smart Templates for standard HPE Private Cloud Business Edition allow customization of storage array model, installed capacity, and adapters.
- Smart Templates for HPE Private Cloud Business Edition at Equinix use pre-defined hardware BOMs that are non-customizable.



Configuration Information

2. Compute Capacity Reservation

Workload Tier	Server Qty	Server Model
Cost Optimized (HPE Alletra Storage MP B10120)	2	ProLiant DL325 Gen11 AMD EPYC 9124 3.0 GHz 16-core 256 GB DDR5-4800
Capacity Optimized (HPE Alletra Storage MP B10130)	3	ProLiant DL325 Gen11 AMD EPYC 9224 2.5 GHz 24-core 384 GB DDR5-4800
Performance Optimized (HPE Alletra Storage MP B10240)	9	ProLiant DL360 Gen11 2x Intel Xeon-Gold 6430 2.10 GHz 32-core 1024 GB DDR5-4800
Scale Optimized (HPE Alletra Storage MP B10140)	12	ProLiant DL360 Gen11 2x Intel Xeon-Gold 6430 2.10 GHz 32-core 1024 GB DDR5-4800
Value Optimized (HPE Alletra dHCI)	3	ProLiant DL365 Gen10 Plus 2x AMD EPYC 7313 3.0 GHz 16-core 512 GB DDR4-3200
Balance Optimized (HPE Alletra dHCI)	6	ProLiant DL365 Gen10 Plus 2x AMD EPYC 7313 3.0 GHz 16-core 512 GB DDR4-3200
Performance Optimized (HPE Alletra dHCI)	12	ProLiant DL365 Gen10 Plus 2x AMD EPYC 7313 3.0 GHz 16-core 512 GB DDR4-3200

Notes:

- Smart Templates for standard HPE Private Cloud Business Edition allow customization of server model, CPU, memory, and installed options.
- Smart Templates for HPE Private Cloud Business Edition at Equinix use pre-defined hardware BOMs that are non-customizable.
- Licenses and software binaries for VMware vSphere are not included and must be provided by the customer. VMware vSphere Foundation and vSphere Standard licenses are supported.
- VMware vSphere Foundation is recommended as VMware Distributed Resource Scheduler (DRS) is required to enable 1-click update functionality. VMware vSphere Standard will require manual migration of VMs from hosts before they are updated.

3. Network Configuration

Network Configuration	Detail
Networking equipment included	Two top-of-rack switches are included along with all transceivers and signal cabling required for the full solution
Networking equipment Excluded	Top-of-rack switches, transceivers, and signal cabling are not included in the solution and must be provided separately.

Notes:

- If networking equipment is included, the deployment and startup services included with HPE Private Cloud Business Edition will include the setup and configuration of top-of-rack switches.
- If networking equipment is excluded and provided separately, then certain prerequisites for network setup must be met in advance of the HPE Private Cloud Business Edition deployment service.
- HPE Private Cloud Business Edition at Equinix will automatically include the top-of-rack switches and the associated setup and configuration.



Configuration Information

4. Rack and power Configuration

Rack Configuration	Detail
Rack included	The solution will include a 42U with integrated PDUs for HPE Private Cloud Business Edition. All Flash: 600mm (W), 1040mm (D) Hybrid Flash: 600mm (W), 1200mm (D)
Rack excluded	The solution will be installed into an existing compatible rack.

Notes:

- Network connectivity is per array (includes both storage controllers)
- Power requirements per array (includes all redundant PSUs)
- The rack and PDU infrastructure required for HPE Private Cloud Business Edition at Equinix is already deployed.

Resources and additional links

- The networking requirements, best practices, supported technologies, and supported network topologies for HPE Private Cloud Business Edition
<https://psnow.ext.hpe.com/doc/a00114771enw>
- Validated Configuration Matrix for HPE Alletra dHCI:
<https://infosight.hpe.com/resources/nimble/validated-configuration-matrix>



Summary of Changes

Date	Version History	Action	Description of Change
14-Jul-2025	<u>Version 11</u>	Changed	Overview and Standard Features sections were updated - Finetune of PCBE and VME features updates were added.
05-May-2025	<u>Version 10</u>	Changed	Overview and Configuration Information sections were updated HPE Private Cloud Business Edition + VME changes
13-Jan-2025	<u>Version 9</u>	Changed	Overview and Configuration Information sections were updated HPE Alletra MP hardware model rebranding applied (Alletra MP → HPE Alletra Storage MP B10000)
18-Nov-2024	<u>Version 8</u>	Changed	Overview, Service and Support and Configuration Information sections were updated. HPE Private Cloud Business Edition smart template for Alletra MP added
01-Jul-2024	<u>Version 7</u>	Changed	Overview and Configuration Information sections were updated.
03-Jun-2024	<u>Version 6</u>	Changed	Overview and Configuration Information sections were updated. Gen11 smart template and support for Alletra MP added Addition of Equinix colocation option
08-Jan-2024	<u>Version 5</u>	Changed	Overview, Service and Support and Configuration Information sections were updated. ASQ to IQ changes
13-Nov-2023	<u>Version 4</u>	Changed	HPE Services Rebranding
05-Sep-2023	<u>Version 3</u>	Changed	Overview and Configuration Information sections were updated. Additional Configuration information added – Servers, Ports, VMware licensing
24-Jul-2023	<u>Version 2</u>	Changed	Configuration Information section was updated
05-Jun-2023	<u>Version 1</u>	New	New QuickSpecs



Copyright

Make the right purchase decision.
Contact our presales specialists.

 Chat now (sales)

 Call now

Shape the Future of QuickSpecs – Your Input Matters



Get updates

Hewlett Packard
Enterprise

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein. © Copyright 2025 Hewlett Packard Enterprise Development Company, L.P.

a50004281enw - 16885 - Worldwide - V11 - 14-July-2025