

# Reimagine hybrid cloud with a completely modern experience

HPE GreenLake for Private Cloud Enterprise

Get started >



# Table of contents

### 3 Every workload in its right place; flexibility for every app

### 4 Managed for you, with the right expertise

- 4 Hybrid strategy, delivered
- 5 Optimized workload placement
- 6 Trusted, scalable infrastructure
- 7 Self-service efficiency and automation
- 8 Cost transparency and predictability
- 9 Performance by persona
- **11** Optimized for workload cost and performance
- **12** Five reasons to choose HPE GreenLake for Private Cloud Enterprise

**Performance by persona** 

#### A true cloud operating model everywhere

The either/or debate between public cloud and private cloud is a thing of the past. The right answer is **both**—with workloads distributed across hybrid and multi-cloud environments based on requirements for performance. This cloud model combines public and private cloud into one cohesive environment, allowing you to take advantage of pay-per-use\* pricing, the scalability and flexibility of cloud computing, and the security of dedicated hardware.

However, for developers the experience of the public cloud has driven exceptional productivity through automated workflows and speeding development, testing, and deployment. A return to DevOps in a traditional on-premises environment, with legacy IT-centric resource provisioning and limited toolset integration, is not an option.

### Advancing the on-premises experience

### What does hybrid cloud done right look like?A consistent cloud experience for managing apps.

- workloads and data
- Self-service access to resources and insights for high-velocity innovation
- Interoperability between public and private clouds
- Visibility, compliance, and control across the hybrid estate

The solution is a hybrid cloud environment with a modernized private cloud. Modern private cloud means on-premises infrastructure with a user experience that delivers the flexibility and self-service efficiency of the public cloud without compromising security, data sovereignty, or regulatory compliance requirements. Effectively, it also allows developers to work on-premises with the same agility, approaches, and toolsets they use in the public cloud.

It is a powerful model—but traditional approaches to building and self-managing a private cloud are notoriously complex, with design, deployment, operation, maintenance, and scale-up time-consuming and costly.

### The cloud that comes to you

HPE GreenLake for Private Cloud Enterprise reimagines the private cloud experience with a scalable, pay-per-use, enterprise-grade solution delivered to you as a managed service across your locations—from edge to cloud. Built for both cloud-native and traditional applications, it supports the self-service deployment of bare metal, virtual machine, and container services.

Its design principles are centered on leveraging open standards and open systems, preventing vendor lock-in with the ability to place your workloads in the environment of your choice based on cost and performance. You also get the full advantage of modern DevOps and automation with infrastructure-as-code (IaC) configuration management, REST APIs, and cloud command shell, for streamlined infrastructure provisioning and integration with existing DevOps/CI toolchains—speeding time to value for your cloud admins and your developers.

Every workload in its right place flexibility for every app	Hybrid strategy, deliv	Hybrid strategy, delivered		Performance by persona		Optimized for workload cost and performance	
Managed for you, with the right expertise	Optimized workload placement		ted, scalable astructure	Self-service efficient and automatic		Cost transparency and predictability	

HPE GreenLake for Private Cloud Enterprise complements your public cloud resources in a true hybrid approach. It's deployed in an on-premises data center or at a colocation facility and fully managed by Hewlett Packard Enterprise, helping eliminate the complexities, inefficiencies, and cost constraints of conventional private cloud solutions. You get the trusted, scalable infrastructure you need—where you need it—to move at the speed of business and mitigate risk.

#### Abstract complexity and modernize operations

- Designed, installed, and managed for you by HPE from system planning and installation through hardware and software maintenance, and day-to-day operations
- Navigate growth and capacity planning with support, so you can focus on revenue-generating activities without surprise cloud bills
- Reduce risk with service management excellence—TSIA STAR Award for Innovation in Managed Services in 2019, 2020, 2021 and 2022



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# Strategic workload placement for your hybrid environment

- Move workloads across your on-premises locations with standardized infrastructure and simplified provisioning
- Improve portability for applications and workloads to the environment of your choice without vendor lock-in or egress fees
- Optimize performance for your workloads, without compromising on compliance or other equally important factors



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### Quick startup with production-ready, workload-optimized infrastructure

- Select from a variety of compute instance and storage volume types to satisfy a range of applications and workloads
- Reduce risk with predefined and pre-configured modular hardware and software components built from field-proven HPE technologies that deliver performance
- Increase environmental efficiency with deployment of bare metal, VMs, and container services using a common pool of resources, supporting multiple workloads with the same footprint



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### Empower DevOps with streamlined self-serve access and automation

- Use an intuitive, browser-based, customizable user interface, application programming interfaces (APIs), CLI, or infrastructure as code (IaC) to configure resources and provision services without further IT intervention
- Provision with speed and automation to perform routine operations such as creating and managing the lifecycle of bare-metal instances, VM compute instances, and container clusters
- Integrate seamlessly with familiar DevOps toolsets, helping minimize friction for developers
- Integrate with configuration automation suites, including Terraform and Ansible, for even greater efficiency



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### Intuitive consumption analytics across your entire hybrid estate

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- View top costs by service type, location, and more: Interactive charts and graphs help you track where you're spending your IT budget and optimize to suit your specific needs.
- Gain visibility into private cloud costs as well as those of your public cloud resources (AWS, Microsoft Azure, Google Cloud Platform<sup>™</sup>)—enabling simple comparison and cost optimization
- Reduce the need for multiple tools and spreadsheets and see all of your usage and spend across your entire IT landscape
- Customize and share reports and graphs: Simple drag-and-drop reporting capabilities provide quick answers and can easily be shared



### Optimized for workload cost and performance

HPE GreenLake for Private Cloud Enterprise delivers meaningful benefits across the entire organization, from DevOps to the C-suite.

### CIOs

Innovate with unparalleled visibility and control of the enterprise hybrid estate.

- Regain control of the organization's hybrid estate so you can focus on innovation and strategy
- Monitor and take action on a range of KPIs, including capacity, cost, and resource utilization
- Bring a self-service experience to the on-premises environment without compromising security, data sovereignty and regulatory compliance

#### **IT administrators**

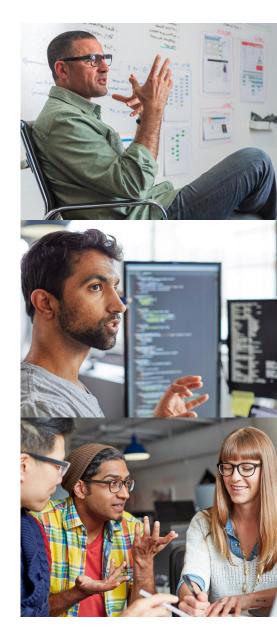
Manage and provision your private cloud resources and securely give users access privileges with defined roles and policies.

- Reduces management complexity and enhances standardization
- Shortens the time between requests to provision and access to cloud resources at scale
- Accelerates access delegation to developers with simplified instance and cluster management
- Helps minimize risk through standardized infrastructure and consistent governance

#### **Developers**

Fast access to workspaces and the flexibility to choose operating systems and containerized app stacks.

- Helps ensure consistent deployment and app configuration
- Reduces manual tasks with DevOps automation
- Enables faster, more consistent application deployment
- Integrates with familiar DevOps toolchains



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### Every workload in its right place; flexibility for every app

Hybrid strategy, delivered

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### Optimized for workload cost and performance

### **FinOps**

Gain visibility into usage and costs across your entire hybrid estate with powerful consumption analytics.

- Enhances governance and control with transparent, predictable costs
- Delivers visibility into usage and costs across private and public clouds
- Organizes costs by service type, location, or business unit, with resource tagging for show-back purposes

### Line of business

Helps ensure successful initiatives launch, faster time to market and on budget.

- Delivers the flexibility to adapt to economic shifts and competitive pressures with scale-up and scale-down flexibility and a pay-per-use model
- Empowers the transformation of traditional and business-critical applications without long procurement processes or up-front capital investment
- Helps ensure spend is aligned with business outcomes





HPE GreenLake for Private Cloud Enterprise runs on infrastructure installed by HPE in your data centers, colocation facilities, or at the edge—in any combination across your locations. Your private cloud offers a different mix of compute instances and storage volumes to support various use cases.

#### Table 1. Compute instances

Description	Example workloads				
General purpose					
For mainstream workloads	Web and application servers	ML Ops Data Prep			
	<ul> <li>CI/CD Pipelines (for example, Jenkins)</li> </ul>	<ul> <li>End-user computing (EUC) /VDI</li> </ul>			
Compute optimized					
For high-performance, compute-intensive workloads	Container and VM orchestration	• Elasticsearch			
	NoSQL databases	<ul> <li>Computer-aided engineering (CAE) / Electronic design automation (EDA) / molecular dynamics</li> </ul>			
Memory optimized					
For high-performance workloads with large datasets in memory	In-memory databases	<ul> <li>◆ SAP S/4HANA<sup>®</sup></li> </ul>			
	Analytics (Spark, Flink, Presto)	Electronic health records (Epic)			
Storage optimized					
For workloads with increased data storage performance and/or	Splunk forward, index, and search	Traditional OLTP databases			
capacity requirements	Splunk archive	• Data lakehouse			
	Data lifecycle	<ul> <li>Software-defined storage services</li> </ul>			

#### Table 2. Storage volumes

Description	Example workloads				
Block storage—standard					
Cost-efficient flash storage for mainstream workloads	• Databases				
	Latency-sensitive applications				
	Web applications				
Block storage—high performance					
Higher throughput and IOPS, for more performance-intensive workloads	Highly transactional production databases				
	High-velocity streaming data				

