Hybrid cloud management complexity

Employing a hybrid cloud strategy brings flexibility, choice, and cost-performance optimization by mixing and matching a range of infrastructure options: private cloud, public cloud, and on-premises. However, managing hybrid cloud environments today is complicated. Organizations may have multiple points of management, preventing an aggregate accounting of resource utilization and costs. Traditional cloud management platforms are difficult to set up and manage, and don’t span public clouds and on-premises. These factors hinder IT organization’s ability to make informed decisions, impacting digital transformation initiatives and operational agility.

Build, operate, and manage hybrid clouds with ease

HPE OneSphere is a software-as-a-service (SaaS)-based hybrid cloud management solution. Through the dedicated SaaS portal, HPE OneSphere provides internal stakeholders (IT operations, developers, and business executives) a unified view so they can manage hybrid cloud environments supporting traditional, virtualized, and cloud-native applications.

The simplified deployment and management features of HPE OneSphere provide a cloud-like experience with on-premises infrastructure. It further allows organizations to integrate Amazon Web Services (AWS®) and Microsoft® Azure® public clouds as well as onboard existing VMware vSphere® and KVM virtual data centers as cloud resource providers.

Better automation of private clouds

The HPE OneSphere IT-as-a-Service portal automates the setup of a private cloud—immediately providing fast self-service access to all your resources. With HPE OneSphere, you can transform a virtual cluster into a private cloud in minutes, giving you simplified, centralized, and controlled access to cloud resources. It automates lifecycle management for on-premises software-defined resources to provide a low ops experience, allowing IT professionals to focus on more strategic tasks.

The containers-as-a-service capability simplifies deployment and operation of containers. It includes Kubernetes® cluster support for container orchestration with a consistent way to provision clusters on public and private clouds so you can deploy a Kubernetes cluster from a service catalog with just the click of a button. HPE OneSphere rapidly provisions production grade Kubernetes clusters on Amazon Web Services (AWS) and on-premises VMware® environments. In addition, the HPE OneSphere admin can import public and private Docker® images and Helm® Charts into the Catalog.

Better control of hybrid cloud environments

HPE OneSphere streamlines and speeds application development and deployment with environments where developers can self-service provision and access Service Catalogs containing templates, cloud-native tools, services, and applications.
HPE OneSphere features

**Automation**
- Integrates with Amazon Web Services (AWS) and Microsoft Azure public cloud
- Allows customers to use OpenStack® APIs for VM vending and storage management
- Integrates with existing VMware vSphere and KVM deployments for private cloud support
- Allows provisioning of Kubernetes clusters on Amazon Web Services (AWS) and VMware vSphere
- New—Integrates with HPE OneView to leverage bare metal management functionality

**Control**
- Automates provisioning of cloud projects
- Enables developers to have all their apps, tools, and clouds at their fingertips, but sanctioned by IT
- Minimizes risks by creating service groups of applications to match project user profiles
- Enables consistent governance across hybrid clouds
- Enables rapid self-service and real-time access to new services
- New—Provides IT operations advanced admin controls for OpenStack-based private clouds

**Analytics**
- Collects and displays usage metrics for resources deployed in managed private and public cloud accounts
- Cost reporting dashboard provides instant access to common data views and reports with ability to drill down into areas of interest
- Multiple cost reporting and utilization meters are available to create custom reports for one or more cloud provider types across different time periods
- New—Display, organize, and categorize deployment resources based on customer defined public cloud tags
- New—Supports the creation of budget-related cost usage reports that provides visibility when an assigned budget is exceeded by actual spending

HPE OneSphere Projects simplify self-service provisioning of IT-designated hybrid cloud resources for developers. Internal users can self-service provision resources, deploy on-premises clouds and workloads, and access public clouds in minutes. They can access service catalogs for their selected public clouds to leverage tools, templates, and services as well. For the IT-sanctioned clouds, it provides choice of development environments, service catalogs, etc., with open APIs, allowing developers and other internal consumers of IT to work with the tools and experiences they prefer—but within boundaries determined by IT. It allows importing of preexisting operating system images and/or application images hosted on private or public clouds. Developers can optionally use HPE OneSphere REST APIs or the native cloud provider APIs and existing orchestration tools to deploy cloud resources.

HPE OneSphere Service Groups enable consistent governance across hybrid clouds and minimize risks by creating service groups of applications to match project user profiles. It provides a local user management system for granting self-service access to services to the subset of users in the Service Group. IT can deploy these Service Groups to projects to streamline provisioning of commonly used services.

Developers can choose from over 325 services in the HPE OneSphere Catalog. IT admins can create a catalog by integrating public cloud catalogs and private cloud repositories. It enables developers to select an operating system and/or application image and deploy that image on a Virtual Machine hosted on either a public or private cloud provider and view and change the operational status of the deployed Virtual Machines.

**Better analytics across your hybrid cloud environment**

HPE OneSphere provides detailed cost insights to track, categorize, and report on costs across multiple clouds. It gives the ability to create dashboards for instant access to common data views and reports with drill down features. Custom reports can be created across one or more provider types with the ability to download data for use with external analytics tools and graphing applications. On the private cloud side, it helps organizations to define their own fixed cost model, which in turn can become the baseline for their internal chargeback.

**Subscription pricing**

**Hewlett Packard Enterprise** helps customers to align cost and demand through its subscription-based pricing for HPE OneSphere. And for the composable infrastructure, HPE provides a flexible, pay-as-you-go pricing.

**Proven HPE Pointnext consulting for accelerated results**

To accelerate time to value for HPE OneSphere, **HPE Pointnext** provides a high-level priority road map outlining key hybrid cloud business goals and next steps. Finally, a portfolio of options is available for enhanced call handling and expert support to provide the reliability, serviceability, and near-continuous availability of the hybrid cloud environment.

Learn more at [hpe.com/onesphere](http://www.hpe.com/onesphere)