HPE CONTAINER PLATFORM

HPE Container Platform delivers an integrated Kubernetes-centric compute and data fabric that supports a wide range of use cases including ML, analytics, IoT/edge, CI/CD, and application modernization.

Businesses that are modernizing their IT stack are doing so by moving workloads to the cloud and leveraging the agility and scale that the cloud offers—73% reported the use of the public cloud. While microservice-based cloud-native application workloads have moved to the cloud, enterprises continue to operate a majority of their applications and workloads in on-premises data centers. Not all of these applications can move to the cloud as there are data gravity, security, regulatory, or other requirements to stay on-premises. The future of enterprise IT will be hybrid, and 84% of enterprises reported plans for multicloud or hybrid cloud.

However, managing applications across a hybrid cloud is extremely complex. In order to manage this complexity, enterprises are increasingly looking to deploy applications as containers with Kubernetes as the orchestration framework. It is expected that 75% of enterprises will have containerized applications in production by 2022—up from 20% today. While it is straightforward to deploy modern, cloud-native applications in containers, these represent a small portion of enterprise applications. The vast majority of enterprise applications are still non-cloud native—deployed on bare-metal servers or virtual machines. These non-cloud-native applications will benefit from agility and portability that containers bring. However, in order to containerize these monolithic applications, enterprises either have to rearchitect them as microservice-based applications or build several additional capabilities into Kubernetes to support these monolithic applications. Both of these choices require specialized skills, can be time-consuming, expensive, and in many cases not possible. As a result, enterprises continue to use different approaches to deliver cloud-native and non-cloud-native applications. This approach perpetuates IT complexity and increases administrative cost with the added complexity of managing applications across a hybrid cloud.

To successfully transform their business and modernize their IT stack, enterprises need a container platform that can also containerize and deploy non-cloud-native applications.

HPE OFFERING

HPE Container Platform is an enterprise-ready container platform that supports both cloud-native and non-cloud-native applications. Built on native open-source Kubernetes, it includes innovations from HPE’s recent acquisitions of BlueData and MapR. BlueData has a proven track record of deploying non-cloud-native Big Data and AI applications in containers and MapR brings a state-of-the-art file system that provides root file system persistence for containers. Together, these capabilities enable the containerized deployment of non-cloud-native applications.

INTRODUCING THE HPE CONTAINER PLATFORM

Turnkey enterprise-grade container management for both cloud-native and non-cloud-native applications

HPE CONTAINER PLATFORM

Multi-tenant BlueData control plane for containerized applications—with open-source Kubernetes orchestration

Flexibility to deploy on any compute, and tap into any data

Pre-integrated persistent container storage from MapR

FIGURE 1. HPE Container Platform architecture

1. IDG Cloud Insights survey, 2018 (N = 550)
2. 1 State of Cloud 2018, Cloudability (report based on actual spend data)
KEY FEATURES

Automated operations: Fast, easy deployment, management, and monitoring of Kubernetes clusters with out-of-the-box configuration of networking, load balancing, and storage.

Hybrid deployments: The ability to deploy on any infrastructure—on-premises, in multiple public clouds, or on the edge.

Persistent Storage: Pre-integrated, scale-out, edge-ready persistent storage with MapR. BlueData DataTap and BlueData FSMount provide connectivity to external data without copying data locally.

100% open-source Kubernetes: With innovations from our BlueData team such as KubeDirector—an open-source Kubernetes-based controller to deploy non-cloud-native apps.

Enterprise ready: Integrations into enterprise security and authentication services with support for high availability, fault tolerance, and resiliency for mission-critical enterprise applications.

1-click provisioning: App Store of curated, prebuilt images for a wide range of applications including machine learning (ML), analytics, IoT/edge, CI/CD, and application modernization.

KEY BENEFITS

Greater flexibility: A unified platform for orchestration of cloud-native and non-cloud-native applications on-premises, in any public cloud, and at the edge

Boost productivity: Delivers a self-service experience through a curated App Store of prebuilt application images. Streamlined deployment and management for a wide range of use cases including application modernization, AI/ML, analytics, IoT, and CI/CD

Reduced risk: Enterprise-class security with integrations into enterprise security and authentication services. In-place access to enterprise data sources without creating data copies

Reduced cost: Lower total cost of ownership with reduced admin overhead and elimination of virtualization tax with bare-metal containerization

Improved ROI: Improves utilization of hardware resources and provides a cloud-like experience for non-cloud-native monolithic applications, which increases the return on hardware investment

NEXT STEPS

Contact your authorized representative for more information.

LEARN MORE AT

hpe.com/info/container-platform