Hewle	ett Packard
Enterp	orise

Check if the document is available in the language of your choice.

# HPE CONTAINER PLATFORM

# A container platform designed to deploy both cloud-native and non-cloud-native applications using open-source Kubernetes—running on bare-metal or virtualized infrastructure, on any public cloud, and at the edge.

Gartner estimates that 75% of enterprises will have containerized applications in production by 2022—up from 20% today.<sup>1</sup> These enterprise organizations are adopting containers and embracing cloud-native microservices architecture, in order to accelerate the speed of application development and innovation—and benefit from greater efficiency and portability. Kubernetes has emerged as the de facto open-source standard for container orchestration and a fundamental building block for cloud-native architectures.

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—with a monolithic architecture and persistent data storage. These non-cloud-native monolithic applications would benefit from the agility and efficiency that containers bring.

The challenge is how to run these monolithic applications in containers, without rearchitecting them. And as enterprise organizations extend the use of containers and Kubernetes beyond development and testing to production environments, they need to address key considerations including security and data persistence.

#### **ENTERPRISE-GRADE CONTAINER MANAGEMENT**

HPE Container Platform is an enterprise-grade container platform that supports both cloud-native and non-cloud-native monolithic applications with persistent data. It includes innovations from HPE's recent acquisitions of BlueData and MapR, together with open-source Kubernetes for orchestration. BlueData has a proven track record of deploying non-cloud-native AI and Analytics applications in containers and MapR brings a state-of-the-art file system and data fabric for persistent container storage. Now enterprises can extend the agility and efficiency benefits of containers to more of their enterprise applications—running on either bare-metal or virtualized infrastructure, either on-premises, in multiple public clouds, or at the edge.

Data Engine	Data Engineers ML Architects		App Developers	DevO	DevOps		
HPE CONTAINER PLATFORM							
© neo4j → mongoDB Databases	& kalka Spark DRILL	H <sub>2</sub> O TensorFlow	App Modernization	GitHub	Here a construction of the second sec		
Multitenant BlueData control plane for containerized applications—with open source Kubernetes orchestration							
Flexibility to deploy on any compute, and tap into any data Preintegrated persistent container storage from MapR							
On-premises Public clouds Edge							

FIGURE 1. HPE Container Platform architecture

#### **KEY FEATURES**

**Multicluster Kubernetes management:** 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.

**Preintegrated with persistent container storage:** Preintegrated, 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 controller to deploy non-cloud-native apps.

**Enterprise-grade security and control:** 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







© Copyright 2019–2020 Hewlett Packard Enterprise Development LP. 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.

a50000371ENW, March 2020, Rev. 3