VMware Tanzu Standard on Oracle Cloud VMware Solution

Deploy, run and manage Kubernetes on Oracle Cloud VMware Solution

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- **Quick Kubernetes Deployment:** Tanzu Standard provides an enterprise-grade open-source aligned full Kubernetes runtime platform that is easy to install and operate on top of Oracle Cloud VMware Solution, as well as on-premises on vSphere and VMware Cloud Foundation.

- **Simplified Kubernetes Operations and Management:** Tanzu Standard comes with Tanzu Mission Control, a global control plane, that enables consistent and efficient management of Kubernetes clusters deployed across multiple infrastructures.

- **Consistent infrastructure for both VM and container-based workloads on-premises and in Oracle Cloud VMware Solution:** Oracle Cloud VMware Solution is powered by VMware Cloud SDDC stack, which provides consistent infrastructure both on-premises and Oracle Cloud Infrastructure.

As the speed of application modernization accelerates, enterprise IT organizations have seen an increasing need to support container-based applications. Kubernetes, the de facto container orchestrator today, is quickly becoming an essential part of your modern infrastructure that is designed to serve both your traditional and modern applications that run across different environments — in private or hybrid clouds, public clouds, and at the edge.

However, due to the fast-changing nature of cloud native technologies, the complexity of the Kubernetes ecosystem, as well as the scarcity of Kubernetes talent, it is often hard for enterprises to get started on Kubernetes and to maintain and manage the Kubernetes infrastructure with consistency and efficiency.

VMware Tanzu™ Standard edition on Oracle Cloud VMware Solution helps simplify Kubernetes adoption and management with industry-leading VMware Software-Defined Data Center (SDDC) technologies and Oracle Cloud high performance infrastructure and networking. With this solution, enterprises can accelerate application and infrastructure modernization by quickly adopting container and Kubernetes technologies on top of the hybrid cloud that provides flexible, scalable and resilient infrastructure that is optimal for running containerized modern workloads along with traditional VM-based workloads.

VMware Tanzu Standard

VMware Tanzu is a portfolio of technologies to support modern apps and infrastructure for delivering better software to production faster. VMware packages Tanzu technologies into solutions that address the most common enterprise modernization challenges. Among these packages is Tanzu Standard edition which targets customers that wish to simplify the deployment and operations of Kubernetes for multi-cloud environments.

Tanzu Standard offers a full enterprise-grade Kubernetes runtime that can be deployed across multiple infrastructures, with a global control plane for consistent and efficient management of multiple Kubernetes clusters across teams and clouds.

vmware®

Oracle Cloud VMware Solution

Oracle Cloud VMware Solution is a customer-managed, VMware Cloud™ based environment consisting of VMware vSphere®, VMware vSAN™, VMware NSX-T Data Center™ and VMware vCenter Server®. Customers have full control VMware environments while leveraging the capabilities of Oracle Cloud Infrastructure. Oracle Cloud VMware Solution provides bare metal compute, advanced L2 network and storage-rich infrastructure to deliver a full-fidelity VMware service for predictable application performance. Oracle Cloud VMware Solution is designed for dynamic, multi-cloud VMware environments.

This consistent, unified cloud infrastructure and operations platform will enable your enterprise to migrate and modernize applications faster while seamlessly moving workloads between on-premises and Oracle Cloud at scale. Enterprises can now move or extend VMware-based workloads without rearchitecting applications or retooling operations. Your IT teams can also easily leverage Oracle services, such as Oracle Autonomous Database, Exadata Cloud and Database Cloud, from the same cloud data centers, on the same networks, with consistent portal access and modernized APIs.

Accelerate Kubernetes adoption on Oracle Cloud VMware Solution with VMware Tanzu Standard

VMware Tanzu Standard Edition on Oracle Cloud VMware Engine

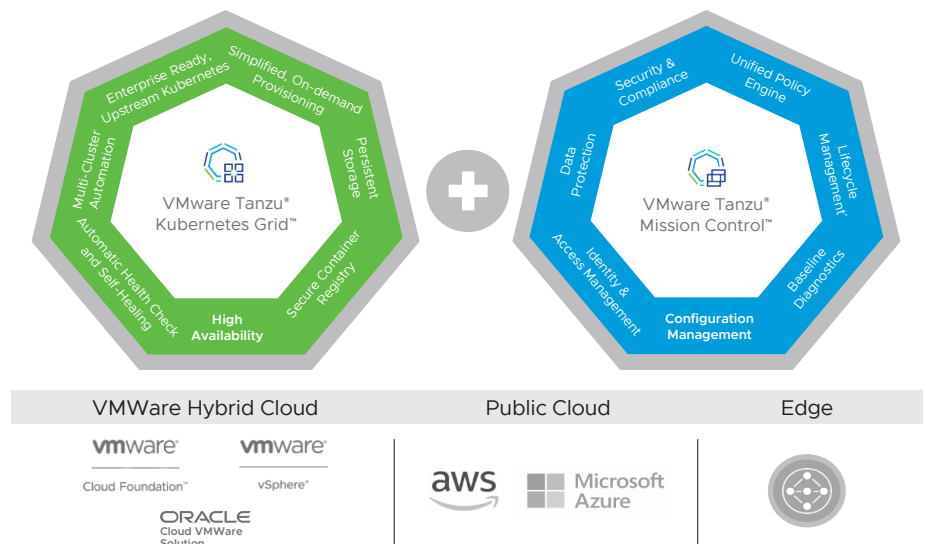### Tanzu Kubernetes Grid with Tanzu Mission Control Standard

Figure 1: VMware Tanzu Standard includes Tanzu Kubernetes Grid and Tanzu Mission Control.

Jumpstart your Kubernetes adoption with the enterprise-grade Kubernetes runtime

Using Tanzu Standard, customers can easily deploy and operate a consistent enterprise-grade Kubernetes runtime platform, powered by Tanzu Kubernetes Grid, on Oracle Cloud VMware Solution, as well as on-premises on vSphere and VMware Cloud Foundation.

Tanzu Kubernetes Grid is designed and built on the leading open-source technologies of the Kubernetes ecosystem. For instance, it has upstream Kubernetes in the core and uses Cluster API for cluster lifecycle management, Harbor for container registry, Prometheus and Grafana for platform monitoring, Fluent Bit for logging, and Contour for ingress. These technologies are packaged and integrated into an easy-to-deploy, easy-to-operate and VMware-supported full Kubernetes runtime platform for running the most mission-critical modern enterprise workloads.

Manage Kubernetes clusters consistently and securely with a global control plane

To enhance the operational efficiency and governance of your Kubernetes clusters, Tanzu Standard also provides a global control plane, powered by Tanzu Mission Control, for managing multiple Kubernetes clusters at scale across environments. Key capabilities offered by this global control plane include:

• Centralized lifecycle management – provisioning, upgrading, scaling and deleting of Tanzu Kubernetes clusters on Oracle Cloud VMware Solution, as well as on vSphere and VMware Cloud Foundation

• Attach any Cloud Native Computing Foundation conformant Kubernetes clusters for consistent policy management, including access management and applying security policies across clusters and clouds.

• Baseline visibility of Kubernetes clusters and workloads across infrastructures for quick identification of issues and troubleshooting

• Managing access and security by applying consistent policies to a fleet of clusters at scale

• Backup and restore clusters and namespaces with built-in Velero

• Inspecting clusters for conformance using built-in Sonobuoy

• Out-of-the-box integration with Tanzu Observability and Tanzu Service Mesh

Learn More

[VMware Tanzu](#)

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Benefits of running your Kubernetes workloads on Oracle Cloud VMware Solution with Tanzu Standard

Running Kubernetes on Oracle Cloud VMware Solution enables enterprises to take advantage of a consistent VMware SDDC on-premises and in Oracle Cloud to run both their traditional and modern workloads.

Run and manage Kubernetes consistently. Deploy a consistent Kubernetes distribution across environments — on-premises on vSphere and VMware Cloud Foundation, on Oracle Cloud VMware Solution — and manage all the clusters consistently via a single control plane.

Standardize on VMware infrastructure. Maintain your established processes, automation, and policy around VMware infrastructure by migrating to Oracle Cloud VMware Solution and leverage the VMware SDDC to run any workload type — both traditional VM workloads and containerized modern workloads.

Gain flexibility and reduce friction. With Tanzu Standard on Oracle Cloud VMware Solution, you have administrative control over the underlying VMware infrastructure on which your Kubernetes workloads are running. In addition, with a dedicated infrastructure, you can better meet your security and compliance requirements.

Run your VMs and Containers on the same infrastructure. Without creating another siloed infrastructure just for your container workloads, running Kubernetes with Tanzu on Oracle Cloud VMware Solution lets you have both your traditional VM workloads and container workloads on the same infrastructure where you can have a single point of governance.

Summary

VMware Tanzu Standard on Oracle Cloud VMware Solution helps enterprises accelerate application and infrastructure modernization. It enables you to quickly adopt Kubernetes through easy deployment and operation of an enterprise-grade Kubernetes runtime while ensuring consistency, security and governance of multiple Kubernetes clusters across environments leveraging the global control plane of Tanzu Mission Control.

As a leading hybrid cloud solution, Oracle Cloud VMware Solution provides a consistent infrastructure for enterprises to run both their traditional VM-based workloads and containerized modern workloads on the same VMware infrastructure.