# VMware Tanzu™ Standard on Azure VMware Solution

Deploy, run, and manage Kubernetes on Azure VMware Solution

As the speed of application modernization accelerates, enterprise IT organizations have seen 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 the cloud native technologies, complexity of the Kubernetes ecosystem, as well as the scarcity of the 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 is an even bigger challenge.

VMware Tanzu Standard on Azure VMware Solution helps simplify Kubernetes adoption and management on the industry-leading hybrid cloud solution that extends the VMware Software Defined Data Center (SDDC) into Azure cloud. 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 the flexible, scalable, and resilient infrastructure optimized for running containerized modern workloads along with traditional VM-based workloads.

### **VMware Tanzu Standard**

VMware Tanzu is VMware's modern apps portfolio which includes products and services for modernizing applications and infrastructure to deliver better software to production faster. Tanzu packages its capabilities across the portfolio into three editions which are clearly defined solutions targeted at the most common enterprise modernization challenges. Among the three editions, Tanzu Standard edition targets helping customers simplify deployment and operations of Kubernetes for multi-cloud environments.

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

### Azure VMware Solution

Azure VMware Solution is an Azure service built with VMware that delivers a vSphere-based, single-tenant, dedicated cloud on Azure. VMware workloads run on bare metal hardware in Azure data centers. Customers can stand up a native VMware environment instantly and quickly gain access to their VM resources. Microsoft operates and supports the environment, and all the necessary networking, storage, and management services.

# VMWARE TANZU STANDARD ON AZURE VMWARE SOLUTION

- 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 Azure VMware
  Solution, as well as on-premises on
  vSphere and VMware Cloud
  Foundation, and on native Azure
  cloud.
- Consistent Kubernetes Operations and Management: Tanzu Standard comes with a global control plane which enables consistent and efficient management of Kubernetes clusters deployed across multiple environments.
- Consistent infrastructure for both VM and container-based workloads on-premises and in the Azure cloud:
   Azure VMware Solution is based on VMware Cloud Foundation which provides consistent infrastructure both on-premises and on the Azure cloud for customers to run and manage both their traditional VM-based workloads and modern containerized workloads consistently.



Azure VMware Solution is a seamlessly integrated hybrid cloud offering that gives customers the VMware software-defined data center (SDDC) experience on Azure. Bringing together the best of VMware and Microsoft Azure, the service provides customers an operationally consistent and familiar way to run, manage and modernize vSphere-based applications with access to a broad range of innovative Azure services and robust disaster protection. Customers can continue to use familiar VMware tools to manage their Azure VMware Solution environment while benefiting from the flexibility, speed, and global reach of the Azure cloud.

# Accelerate Kubernetes adoption on Azure VMware Solution with VMware Tanzu Standard



## 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 Azure VMware Solution, as well as on-premises on vSphere and VMware Cloud Foundation, and on native Azure cloud.

Tanzu Kubernetes Grid is designed and built leveraging 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 Azure VMware Solution, as well as on vSphere and VMware Cloud Foundation
- Attaching any conformant Kubernetes clusters for consistent management, including Kubernetes clusters from Azure Kubernetes Service



#### LEARN MORE

VMware Tanzu

https://tanzu.vmware.com/tanzu

· Azure VMware Solution

https://www.vmware.com/cloud-solutions/azure.html

#### **HOW TO PURCHASE**

- Tanzu Standard is licensed based on cores. Please reach out to your VMware sales representative for more details on pricing and packaging.
- For more information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit vmware.com/products, or search online for an authorized reseller.

- Global visibility of Kubernetes clusters and workloads across environments 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

# Benefits from running your Kubernetes workloads on Azure VMware Solution with Tanzu Standard

Running Kubernetes on Azure VMware Solution enables organization to take advantage of a consistent VMware SDDC on-premises and in the Azure 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 Azure VMware Solution, and on native Azure – and manage the 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 Azure cloud while leveraging VMware SDDC to run any workload types – both your traditional VM-based workloads and containerized modern workloads.

More flexibility and controllability over your infrastructure. With Tanzu Standard on Azure VMware Solution, you have full control over your underlying VMware infrastructure that your Kubernetes workloads are running on. In addition, with a dedicated environment, 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 your VMware SDDC with Azure 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 Azure 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 Standard.

As the leading hybrid cloud solution, Azure 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.

