



# **VMware TKGI (Tanzu Kubernetes Grid Integrated Edition) Overview**

NetApp Solutions

NetApp  
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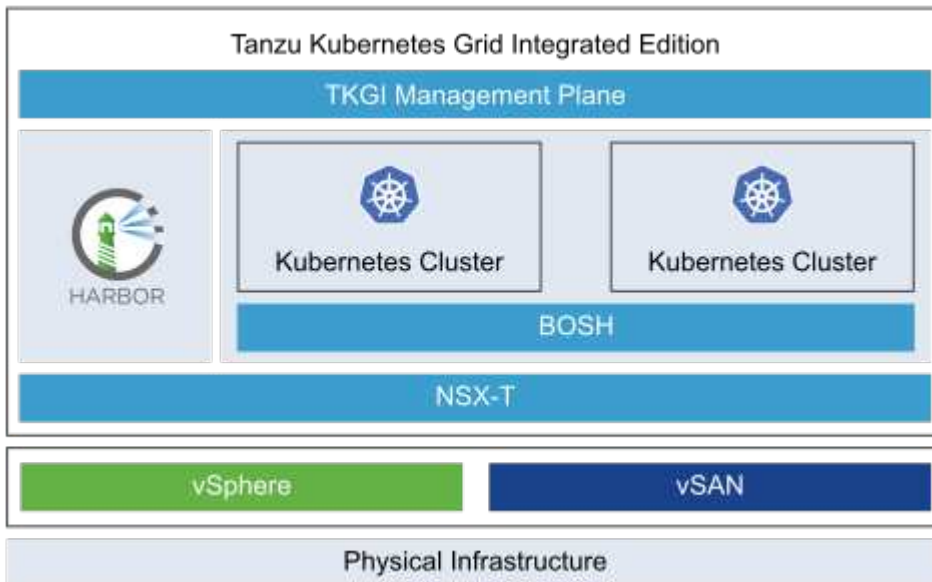
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# VMware Tanzu Kubernetes Grid Integrated Edition (TKGI) overview

VMware Tanzu Kubernetes Grid Integrated (TKGI) Edition, formerly known as VMware Enterprise PKS, is a standalone container orchestration platform based on Kubernetes with capabilities such as life cycle management, cluster health monitoring, advanced networking, a container registry, and so on. TKGI provisions and manages Kubernetes clusters with the TKGI control plane, which consists of BOSH and Ops Manager.

TKGI can be installed and operated either on vSphere or OpenStack environments on-premises or in any of the major public clouds on their respective IaaS offerings. Furthermore, the integration of TKGI with NSX-T and Harbour enables wider use cases for enterprise workloads. To know more about TKGI and its capabilities, visit the documentation [here](#).



TKGI is installed in a variety of configurations on a variety of platforms based on different use-cases and designs. Follow the guide [here](#) to install and configure TKGI and its prerequisites. TKGI uses Bosh VMs as nodes for Tanzu Kubernetes clusters which run immutable configuration images and any manual changes on Bosh VMs do not remain persistent across reboots.

Important notes:

- NetApp Trident requires privileged container access. So, during TKGI installation, make sure to select the Enable Privileged Containers checkbox in the step to configure Tanzu Kubernetes cluster node plans.

Worker Node Instances ⓘ

3

Worker Persistent Disk Size ⓘ

50 GB

Worker Availability Zones ⓘ

☒ az

Worker VM Type ⓘ

medium.disk (cpu: 2, ram: 4 GB, disk: 32 GB)

Max Worker Node Instances ⓘ

50

Errand VM Type ⓘ

medium.disk (cpu: 2, ram: 4 GB, disk: 32 GB)

☒ Enable Privileged Containers (Use with caution) ⓘ

Admission Plugins

☐ PodSecurityPolicy ⓘ

☐ SecurityContextDeny ⓘ

Cluster Services

☒ Force node to drain even if it has running pods not managed by a ReplicationController, ReplicaSet, Job, DaemonSet or Stateful Set ⓘ

☒ Force node to drain even if it has running DaemonSet managed pods ⓘ

☒ Force node to drain even if it has running pods using emptyDir ⓘ

☐ Force node to drain even if pods are still running after timeout ⓘ

Node Drain Timeout (minutes, min: 0, max: 1440) ⓘ

0

Pod Shutdown Grace Period (seconds, min: -1, max: 86400) ⓘ

10

SAVE PLAN

DELETE

- NetApp recommends that all production environments be deployed in multiple master deployments for fault tolerance with the choice of worker nodes' configuration to meet the requirements of the intended workloads. Thus, a recommended TKGI cluster plan would consist of at least three masters and three workers with at least four vCPUs and 12GB of RAM for a highly intensive workload.

Next: [NetApp storage systems overview](#).

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