

Build a Developer-Ready Infrastructure

Running vSphere with Tanzu on Dell EMC PowerEdge servers is the fastest way to get started with Kubernetes.

vSphere with Tanzu delivers the need for speed

- Speed provisioning by 90%⁵
- Reduce path to production time by 82%⁵



kubernetes

Organizations looking to maintain their competitive edge have modernization on the mind. But they're not just thinking about their infrastructure. They're considering all facets — including application modernization.

Modern apps are on the rise and will only continue to grow. Over the next five years, enterprises will build 500 million logical apps using cloud-native tools and methods.¹ Container usage is also skyrocketing and projected to grow at 64% compound annual growth rate (CAGR) through 2022.² And, finally, Kubernetes[®] is clearly the container platform of choice, as 97% of businesses running containers are using a Kubernetes-based platform.³

The good news for organizations, both large and small, is that VMware[®] vSphere[®] with Tanzu Basic⁴ is the fastest way to get started with Kubernetes. It aligns developers and IT with a single solution that lets you run virtual machines (VMs) and containers on the same platform. And, when you use this solution with proven Dell EMC PowerEdge servers, you can simplify and improve your experience even further.

Get started with Kubernetes — fast.

vSphere with Tanzu Basic⁴ is the new feature for containerized applications. It brings developers and operations together with a developer-ready infrastructure. Organizations no longer need multiple separate systems for their VMs and containers. Instead, vSphere 7 with Tanzu⁴ enables the DevOps model with infrastructure access for developers through Kubernetes APIs.

vSphere with Tanzu solves some of the key challenges organizations have been experiencing around container usage, namely the time and expense of having to re-architect them when moving from the cloud to on-premises. Now developers will be able to use containers in the standard data center, where most of their applications already exist. Of course, this makes developer teams more agile and the business better able to respond to rapid changes.

Key features

- **Tanzu Kubernetes Grid Service** allows developers to manage consistent, compliant and conformant Kubernetes clusters.
- **vSphere Pod Service** allows developers to run containers directly on the hypervisor for improved security, performance and manageability.
- **Storage Service** allows developers to manage persistent disks for use with containers, Kubernetes and VMs. Deploy existing block and file storage infrastructure for containerized workloads.
- **Network Service** allows developers to manage virtual routers, load balancers and firewall rules. Leverage existing networking infrastructure using the centralized interface of vSphere Distributed Switch (VDS) to configure, monitor and administer switching access for VMs and Kubernetes workloads.

¹ IDC FutureScape: Worldwide IT Industry 2021 Predictions, [Doc # US45599219](#), October 2021.

² IDC, Worldwide Container Infrastructure Software Forecast, 2018–2022, December 2018.

³ IDC Container Infrastructure Software, [Doc# US46185520](#), April 2021.

⁴ vSphere with Tanzu is available as an add-on with vSphere 7 U1 (or greater) Enterprise Plus.

⁵ 2017 and 2018 Pivotal customer case studies. n=15. "Process Time" = hands-on work (vs. "total time" being the time to deliver). Averages are exclusive of highest and lowest measures.

Advantages of running vSphere with Tanzu on PowerEdge servers



With vLCM and OMIVV, it took **98% fewer steps** to update the hypervisor and firmware on an 8-node PowerEdge cluster.⁶

Put your business on a solid path to success when you run vSphere with Tanzu on modern, evolving Dell EMC PowerEdge servers. Together, we combine best-in-class hardware and software to help you confidently address your modernization initiatives.

You can count on quality performance and advanced security. PowerEdge scalable business architecture makes it easier for you to meet dynamic and varying workload requirements. And combining PowerEdge's enhanced cyber resilience with VMware's VM-level encryption provides multi-layer security that protects your business even further.

For over 20 years, we've worked closely to integrate our technology solutions and support. Dell Technologies was one of the first server manufacturers to implement **vSphere Lifecycle Manager (vLCM)**, which brings together firmware and software updates for simplified lifecycle management. When used with **OpenManage Integration for VMware vCenter (OMIVV)**, a vCenter® plug-in, you're able to speed up management, working in a familiar environment.

Finally, Dell Technologies has over 1,800 VMware certified Dell Technologies support professionals ready to address your needs. Get your hardware and software issues resolved with a single phone call.

Expand your modernization efforts today.

Getting IT and developers on the same page is key to modernization — and this solution does exactly that by enabling VMs and containers to run on the same platform. Take agility to the next level with a solution that delivers the alignment and speed IT administrators and developers have long been seeking. Get started today with a strong infrastructure foundation built on VMware and Dell Technologies solutions.

⁶ Principle Technologies report commissioned by Dell Technologies, "New VMware vSphere 7.0 features reduced the time and complexity of routine update and hardware compliance tasks," August 2020.



Learn more about VMware vSphere with Tanzu on Dell EMC PowerEdge servers.



Explore the advantages of Dell EMC PowerEdge servers.



View the infographic VMware vSphere with Tanzu on Dell EMC PowerEdge servers.



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