VMware Tanzu

Innovate and grow your business on any and many clouds—fast

At a glance

VMware Tanzu is a modular cloud native application platform that enables vital DevSecOps outcomes in a multi-cloud world.

Key outcomes

- **Increase developer productivity and invention** – Onboard developers quickly, freeing up their time to devote to solving real business problems and delivering new customer value.

- **Speed up and secure modern software delivery** – Get cloud native apps to production fast with confidence and adapt quickly to changing business, customer and security requirements.

- **Centralize and scale cloud native operations** – Manage all Kubernetes as one for maximum efficiency and security while operating highly available and performant applications for your customers.

Driving business growth with cloud native apps

Your business relies on continuously delivering and optimizing modern software that provides the best customer experiences and competitive advantages on any cloud and at the edge. Your software portfolio probably includes new cloud native and existing apps that are modernized for cloud environments. Being great at modern software means focusing on the full lifecycle of building, delivering and managing cloud native apps—from how you support developers to operating in production at scale.

This effort requires tight collaboration across development, security and operations teams, ensuring each team's needs are met but with a clear separation of concerns. Developers can focus on delivering innovative business logic. Security teams can ensure security and compliance guardrails are inserted end to end (and automated). Operations teams can focus on running a secure, scalable and useful platform. VMware Tanzu® enables you to harness the power of cloud native technologies and practices to empower collaboration and drive your business forward.
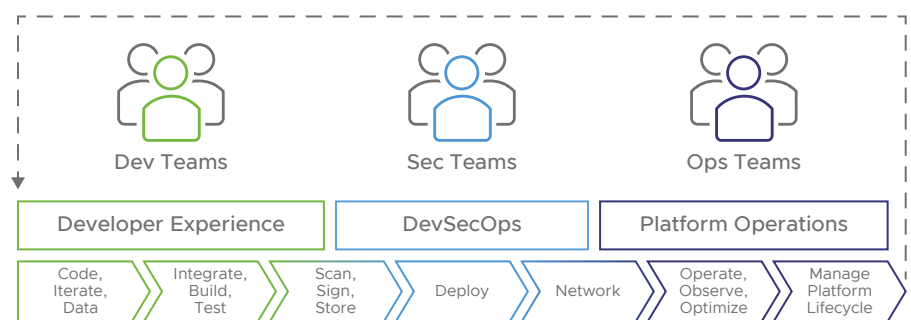
Figure 1: Modern software workflow from supporting developer velocity to operating apps in production at scale.

Key capabilities

- A streamlined, self-service **developer experience** for any Kubernetes that can fit a dev team's preferred practices and workflows while automating the toil of infrastructure, packaging and security

- Flexible, automated software delivery across apps and teams with **built-in security and compliance** guardrails starting at the source code

- **Centralized Kubernetes operations model** providing governance, networking, security and observability to run your apps reliably and at scale on any and multiple clouds

- **Consulting services** for modernizing, building and managing cloud native apps and platforms

VMware Tanzu use cases

VMware Tanzu is a modular cloud native application platform that enables development and operations teams to deliver business value faster and more securely to any cloud, as well as manage apps at scale across clouds. Using VMware Tanzu, you can reduce the complexity of building, delivering and operating cloud native apps in a multi-cloud world, enabling innovation to happen on your terms. The following use cases provide more details of how VMware Tanzu can help your organization.

Modernize existing business-critical applications

Your existing applications can be difficult to update, integrate and scale. This can keep you from creating new, innovative digital experiences for your customers. It also adds risk over time by harboring potential security vulnerabilities.

VMware Tanzu with VMware Tanzu Labs™ can help you create and execute your app modernization strategy. You can replatform and rearchitect existing software to be resilient and continuously delivered, all while running in cloud environments. You can also modernize your infrastructure to simplify how your clouds, clusters and apps operate with security, stability and scale in mind.

Streamline the developer experience for any Kubernetes

Your business is at its best when you have happy developers creating value for your customers. Developers should be able to focus on getting their code working in production, and not spending time on packaging, security or infrastructure, or trying to figure out Kubernetes.

VMware Tanzu offers a superior developer experience for building and deploying software quickly and securely on any compliant public cloud or on-premises Kubernetes cluster. Developers can access preconfigured cloud native app templates and a rich set of rapid tooling to jump-start development and debug code straight from their IDE. Developers can also maintain visibility of applications at runtime to troubleshoot and improve their apps.

Enable a modern DevSecOps practice

The software supply chain has become a new ground for infiltration, manifesting vulnerabilities in open source software, compromised pipeline tools, and source code integrity. These increased security concerns can have a detrimental impact on app delivery speed and your business.

VMware Tanzu helps you improve your security posture as you build and deploy containers to any cloud continuously. Automate security and compliance tasks through preapproved paths to production, logging and tracking the provenance of your code. You can also automate patching as updates become available. Enable operations and security teams to customize software supply chains to model their security processes and use compliant container images.

VMware Tanzu Labs services

Technology is only part of any modernization initiative. You may need support and expertise on your journey to deliver the outcomes you want in the time frame you need.

VMware Tanzu Labs can empower your teams to respond faster to your customers' needs and deliver the results that drive your business. With Tanzu Labs, you can:

• Build and modernize applications, and quickly assess business-critical applications so you can start migrating existing software immediately.

• Develop a Kubernetes-based app platform and run it at scale, making life better for developers along the way.

• Adopt modern practices and culture changes necessary for meaningful transformation and sustained success.

Centrally manage, secure and monitor your Kubernetes estate

Chances are your enterprise is living in today's multi-cloud reality and so is your Kubernetes infrastructure. Managing these separate environments can be a heavy lift and unscalable, especially as more development teams start to use Kubernetes platforms.

VMware Tanzu provides a set of capabilities that empower your platform operations teams to provision, manage, connect, secure and observe a multi-cloud Kubernetes platform. From a centralized software-as-a-service (SaaS) management hub, you can manage security and access policies for all compliant Kubernetes distributions. You can impose networking and security measures at multiple layers to meet the strictest security and compliance requirements. You can also gather and analyze platform and application metrics to proactively detect and fix anomalies, as well as fine-tune your infrastructure and applications for best performance.

Enrich your public cloud strategy and reduce risk of vendor lock-in

Companies like yours are moving to the public cloud in some capacity. In fact, most organizations are multi-cloud by happenstance or design, inclusive of one or more public clouds, private clouds and edge. With silos of cloud usage, you can have inconsistent experiences for operations and development, which makes application delivery, security and management across clouds a significant challenge. Even if you are concentrated on a single public cloud, in many industries, that's surfacing as a business risk.

By abstracting applications from infrastructure, VMware Tanzu offers a consistent developer experience on any Kubernetes as well as the ability to operate all Kubernetes as one for maximum efficiency and security—whether it's in the public cloud or on VMware vSphere®. This model enables you to choose the best landing zones for your apps and can provide more flexibility in public cloud adoption. It lets your business needs dictate cloud usage and avoids lock-in to any single cloud vendor or set of tools.
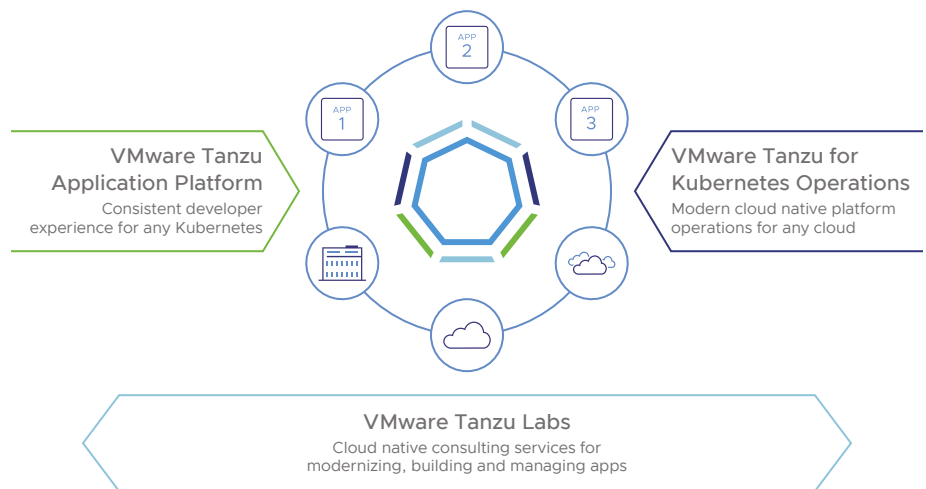
vmware®

VMware Tanzu Application Platform

Enhance developer productivity through faster, more secure app design, development, and delivery

VMware Tanzu Application Platform™ is a modular, application-aware platform that provides a rich set of developer tooling and a pre-paved path to production to build and deploy software quickly and securely on any compliant public cloud or on-premises Kubernetes cluster. It helps jump-start app development, boost developer velocity, and accelerate the path to production.

VMware Tanzu for Kubernetes Operations

Access a simplified, consistent approach to container deployment, scaling and management

VMware Tanzu for Kubernetes Operations provides the foundation for building a modern Kubernetes-based container infrastructure at scale across all clouds. It helps simplify container management with tools, automation and data-driven insights that boost developer productivity, secure applications and data, as well as optimize infrastructure performance across all your clouds.

Figure 2: VMware Tanzu solutions.