Introducing VMware Tanzu Platform

Cloud native app platform for streamlined developer experience, app management and operations

"We selected Tanzu because it was one of the only products that can help us orchestrate multiple stacks....Tanzu solutions provide the platform for my… developers to do their best work, from concept to solution rollout, without the need for additional coordination or large teams."

Tim Hansen
IT operations manager
American First Credit Union

Today's dynamic business landscape requires organizations to respond swiftly to market demands and accelerate the delivery of new products and engaging customer experiences. However, many IT teams struggle to keep up and spend too much time on manual activities. App development teams are under pressure from the business to produce iterations quickly, but they lack the right automation or services to make innovating at pace easier. Furthermore, IT teams often support multiple application runtimes for different application types or team preferences which drives variability in the path-to-production. All of this leads to added complexity, adhoc problem solving, and greater potential for manual errors as teams try to adapt to business needs. Without codified standards, human error introduces risk and makes it difficult to perform root cause analysis across disparate tooling, apps, infrastructure and platforms. With VMware Tanzu® Platform, organizations can develop modern software faster and more safely, through a curated and integrated set of capabilities. Tanzu Platform removes complexity and increases consistency for the Application and Operations teams regardless of application runtime.

Single command push to prod
Instrumented with middleware and infrastructure services

Security built-in
Application accelerators and automated container builds

Discovery, self-service
Standard, built-in and third-party or OSS curated services

No downtime updates
Scale from zero to infinity with start, stop, update app operations

Golden commands for expedited app delivery

With Tanzu Platform, teams can easily handle the complexities of different application types and runtimes without sacrificing speed or efficiency. Whether you deploy applications to Cloud Foundry or Kubernetes, Tanzu Platform provides a set of simple commands tied to powerful abstractions that streamline app development and delivery. Application teams are equipped with four golden commands—*build, bind, deploy and scale*—to easily build secure containers, bind self-provisioned application services, push code to production, and scale and update those applications in production. These golden commands are part of an elegant developer experience that speeds up app delivery and reduces onboarding and training needs. Application teams can swiftly create, test and

vmware®
by Broadcom

Tanzu Platform benefits

Simple for developers, powerful for business – Simplify building and deploying software across various infrastructures with four simple commands: Build, bind, deploy and scale. Developers can focus on coding without the hassle of packaging, security or Kubernetes learning curve.

Optimized for VMware Cloud Foundation™ –Together, Tanzu Platform and VMware Cloud Foundation streamline the deployment and management of virtualized infrastructure and app delivery.

Supercharged for Spring apps – Tanzu Platform is designed to elevate the resilience, security and performance of Spring apps, improving uptime and seamlessly integrating with advanced analytics tools.

Delivering expedited AI-driven apps

Enable your developers to deliver GenAI apps while remaining secure and compliant with GenAI for Tanzu Platform.

Private AI capabilities ensure that your corporate data and intellectual property are not exposed to third-party tools. With curated accelerators customized according to your organization's best practices, your developers can safely access GenAI tools with guardrails in place.

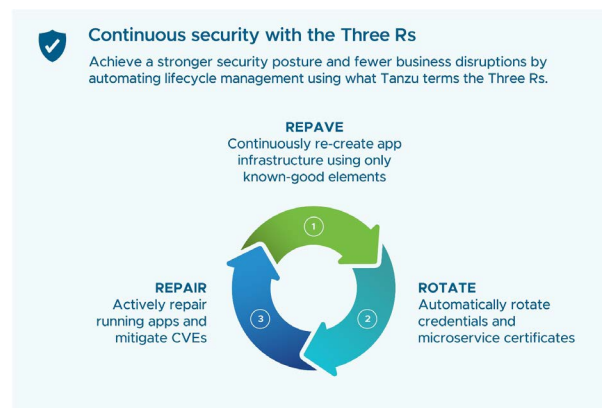Learn more about Tanzu Platform AI at tanzu.vmware.com/platform/private-ai.

deploy applications without the burden of configuring infrastructure, waiting on IT tickets, or managing the underlying infrastructure. Tanzu Platform simplifies the process of deploying and managing applications across different environments by providing a unified interface and set of tools for all applications.

Reduce risk while accelerating app delivery

Tanzu Platform helps protect your apps and infrastructure with continuous, automated lifecycle management of the platform and applications. Tanzu Platform extends cloud native security and governance practices through the application lifecycle with what we call the **Three R's**:

- Ability to **Repave** every server and application in the environment regularly and with no downtime; re-creating the infrastructure over time from all known-good elements, thus reducing potential attack surface and avoiding configuration drift.
- Actively **Repair** running applications by surfacing and updating code dependencies based on common vulnerabilities and exposures (CVEs).
- Finally, Tanzu Platform automatically **Rotates** credentials and microservice certificates to reduce leaked API tokens, encryption keys, and passwords that often break through bottom-up configuration automation.

The result is a stronger security posture and fewer business disruptions, giving operations teams and platform engineers more time to focus on developer experience.

Continuous security with the Three Rs
Achieve a stronger security posture and fewer business disruptions by automating lifecycle management using what Tanzu terms the Three Rs.

REPAVE — Continuously re-create app infrastructure using only known-good elements
ROTATE — Automatically rotate credentials and microservice certificates
REPAIR — Actively repair running apps and mitigate CVEs

App-to-platform insights, powered by AI

Tanzu Platform provides a common control plane and data model with a centralized hub and dashboard for any app, cloud, runtime or tool across team roles with contextual app visibility. Your teams gain a shared understanding of code, containers, Cloud Foundry foundations, Kubernetes clusters, and underlying infrastructure all in one place.

Tanzu Platform seamlessly integrates with your organization's existing visibility and monitoring tools as well as existing CI/CD and observability solutions. You can reduce your mean time to resolution and remediate more quickly with a

vmware®
by **Broadcom**

VMware Tanzu Labs

To ensure your organization gets the most out of its platform investment, it's critical to hit the ground running, find quick wins, and establish value early.

Tanzu Labs partners with your organization to help accelerate the value of the Tanzu Platform and set your team in motion to achieve long-term success. Tanzu Labs provides services for every step of your platform journey, beginning with configuring your platform and migrating valuable apps, to helping implement best practices for managing a developer-centric platform. As your platform grows, our experts can help you build new or modernize apps to land on the platform and help scale your usage across teams and the enterprise.

No matter your platform goals, we'll help you deploy the apps that matter most and help you treat your platform as a product, ensuring it continues to evolve and scale as your business needs change and grow, to help continually optimize delivery time, risk and waste.

Learn more at tanzu.vmware.com/labs.

contextual visibility from the app layer, through platform and to the infrastructure layers underneath. Tanzu Platform provides proactive recommendations and speeds troubleshooting via natural language queries, powered by AI. In addition, Tanzu Platform provides access to Spring app topology through Spring-specific instrumentation, enhancing insight into system architecture and behavior.
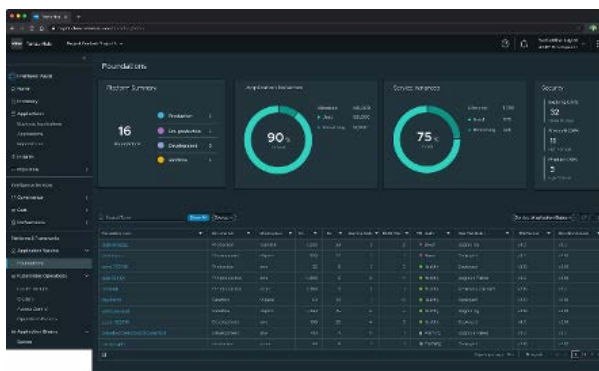

Figure 1: App to infrastructure visibility.

Secure, self-provisioned app services

Tanzu Platform includes built-in, self-provisioned application services and content that further speeds developer velocity. With Tanzu Platform, developers gain self-service to the components and open source libraries they need, while platform teams can seamlessly enforce compliance, security and customer-specific requirements. Tanzu Platform offers ticketless, self-provisioned, on-demand services and components for secure, rapid development.

- **Store, process and query data quickly, and at scale** – Capture data sets of all types, make them available to every workload, and ensure they're immediately available for use for a seamless developer experience. Tanzu Platform includes entitlements for relational databases, messaging, and caching with VMware Tanzu for Postgres, VMware Tanzu for MySQL, VMware Tanzu RabbitMQ, and VMware Tanzu for Valkey.

- **Leverage a powerful ecosystem of brokered services** – Teams deploying applications to Cloud Foundry have access to a rich collection of third-party, brokered services across the software vendor landscape including public cloud providers. Leverage your favorite tools across OSs and commercial vendors with service brokers for Amazon Web Services, Google Cloud Platform, and Microsoft Azure. Easily access partner services like GitLab, Apigee, New Relic, and many more.

- **Curated and trusted open source packages** – Tanzu Platform provides access to customized, continuously maintained open source components with VMware Tanzu Application Catalog, powered by Bitnami. Craft a private catalog of custom-configured, pre-packaged open source application components that are customized to enterprise requirements, continuously maintained, and privately delivered.

vmware®
by **Broadcom**

> "As we moved toward modern apps and microservices, we discovered 'force multipliers,' which increase efficacy, such as VMware application accelerators, and customizable templates imbued with security and observability… This helped developers who were less familiar with microservices get on the path to production quickly and safely."

Tom Eck
Senior Vice President of
Digital Transformation
Fiserv

Leverage popular application runtimes and developer frameworks

Tanzu Platform unifies the platform engineering and operations experience for **Cloud Foundry** and **Kubernetes deployments**. Application teams can deploy to either runtime depending on application and business needs. Tanzu Platform for Cloud Foundry offers an opinionated runtime with streamlined workflows, automation, self-service capabilities, access to third-party service brokers, and high availability for microservice-based architecture. Or deploy applications to Tanzu Platform for Kubernetes, offering a flexible, Kubernetes-based container orchestrator with portability across environments, a wide range of integrated tools and resources, and efficient application operations in dynamic environments.

Tanzu Platform also offers an enhanced development and deployment experience for Java applications built with **Spring**. Gain built-in visibility of Spring app topology and dependencies, making it easier to keep your Spring apps up to date. Automated configuration of company-specific Java/Spring policies help keep Spring apps compliant. Improve Spring app resiliency with robust observability features, thanks to Spring-specific instrumentation and automatic validation of industry compliance standards.

Summary

To respond to market needs, it is essential for organizations to accelerate application delivery. However, without a unified set of capabilities and codified patterns, rapid app delivery can at best be cumbersome, and at worst introduce risk and technical debt.

Tanzu Platform offers a best-in-class **developer experience**, a **simple set of developer commands**, and shared **visibility from app to data to infrastructure**, so enterprises can increase agility and speed up delivery of apps to market.

For more information on Tanzu Platform, visit tanzu.vmware.com/platform or contact us.