

Tanzu Cloud Native webinars

Making life simpler for your
developers, with a portal

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Agenda

- Accelerators the easy way to production
- Documentation and how to access / update it.
- Exposing and consuming API's within the business
- Building containers a smarter way
- Avoiding pipeline sprawl
- Security overview and guardrails

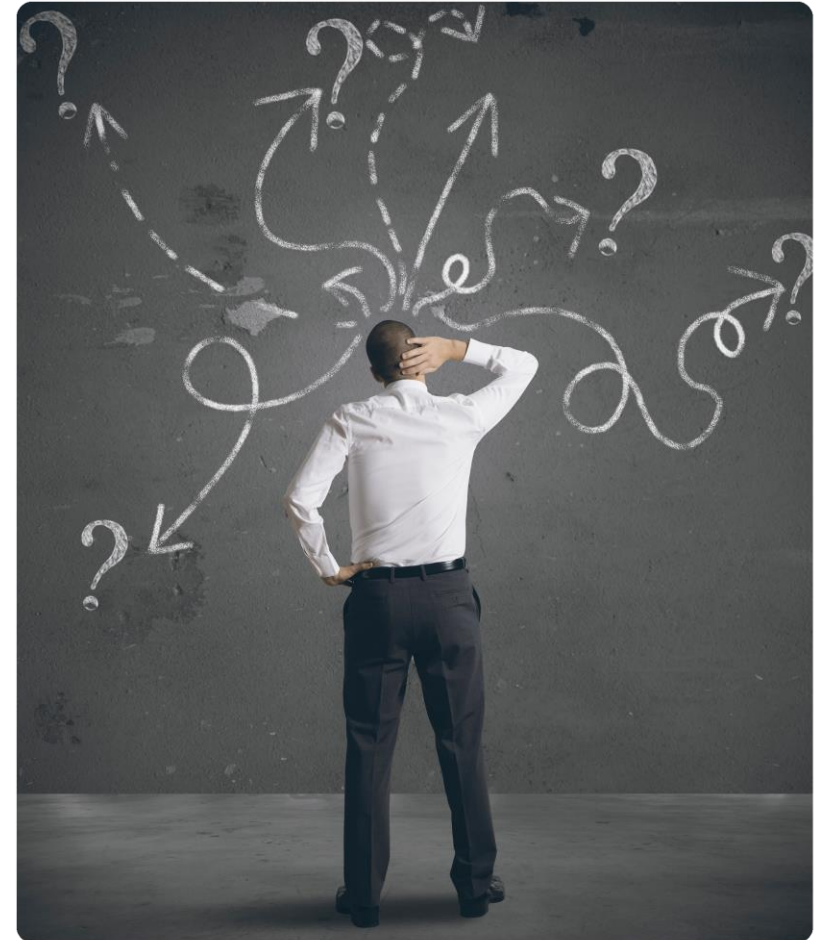


The purpose of this Webinar

Is to give an introduction to Cloud Native concepts and technologies.

We start with the basics, and try to take it to the next level.

Questions : Please use the Q/A function.
We will look at them In the end.



What is a Developer Portal ?



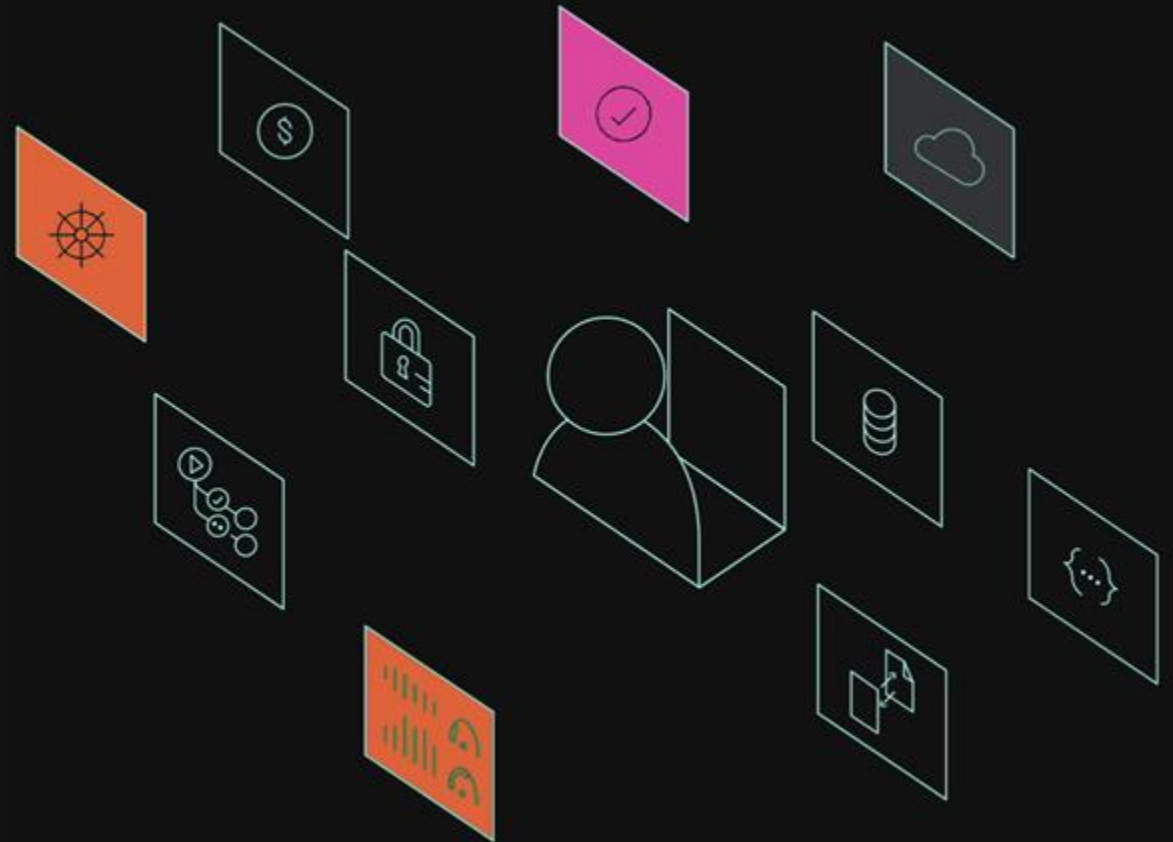
A developer portal = one frontend for your entire infrastructure

Unifies all your tooling, services, apps,
data, and docs with a single, consistent UI

Makes sense of everything in your
ecosystem, regardless of how and where
individual components are running

Let developers focus on what they do best
(leading to much less activity in #aaargh
Slack channel)

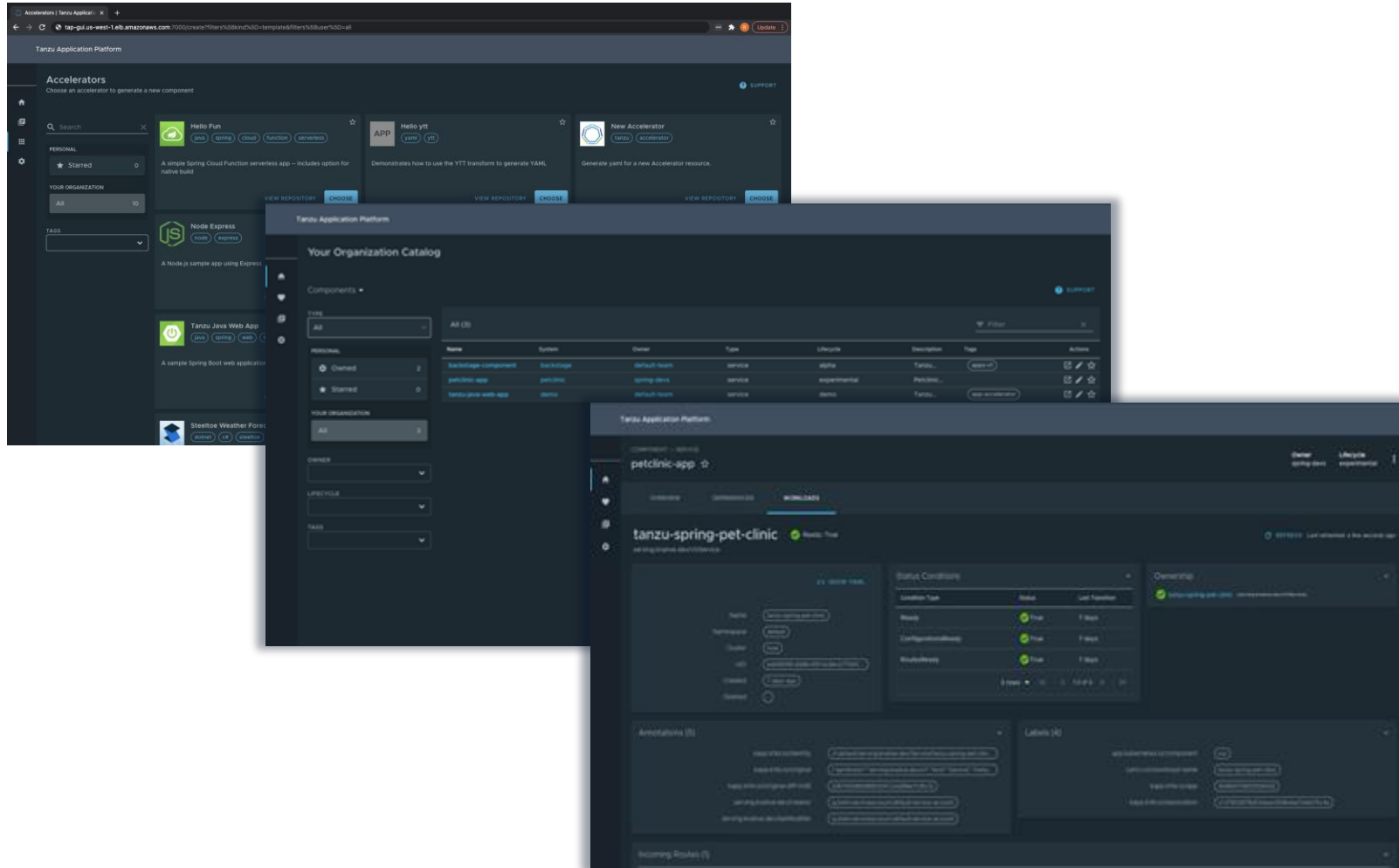
NerdOut Podcast



Tanzu Application Platform (TAP)



Based on Backstage, but with it's own opinions (and focus)



Pre installed with

- Docs
- Accelerators
- API's
- Supply Chain
- Security Analytics

Only runs on K8S

Documentation

DOCUMENTATION / PYTHON TEST

Python Test

Home

Component
python-test

Search python-test docs

Python Test

[The Application](#)

[Links](#)

Python Demo app

This demo app is showing Uber pickups in New York City

It's based on the Python module Streamlit, and is part of their demo applications. It's a simple application, showing Uber pickups, in New York City.

All data, can be manipulated, using sliders, and it's also possible to see the raw data.

Uber pickups in NYC

Build using Tanzu Application Platform v1.3.2 - kongsberg

Data loaded

Show raw data

Number of pickups by hour

Hour	Number of pickups
1	400
2	450
3	500
4	550
5	600
6	650
7	700
8	750
9	700
10	650
11	600
12	550
13	500

- Based on Mkdocs
- Written in markdown
- Documentation & Code in same repo.
- Build when you push(sort of)

API

API — OPENAPI
fastapi-test-tanzu.dk ☆

Owner: denmark-team

Overview Definition

fastapi-test-tanzu.dk

OpenAPI Raw

FastAPI 0.1.0 OAS3

Servers: <https://fastapi-test.default.tanzu.dk>

default

GET / Root

Parameters CANCEL

No parameters

EXECUTE

Responses

Code	Description	Links
200	Successful Response	No links

Media type: application/json

Controls: Accept header

Example Value Schema

- Based on OpenAPI
- Auto updated with app
- Dependencies
- Internal / External Api's
- Swagger interface

Application Accelerators

Application Accelerators
Create new software components using accelerators

Available Accelerators SUPPORT

Search

Accelerators

- PERSONAL**
 - ★ Starrred 0
- YOUR ORGANIZATION**
 - All 16
- TAGS**
 - ▼

AppSSO Starter Java ☆
Spring Boot application that supports single sign-on (SSO) via Spring Security OAuth 2 Client library.
Tags: sso, authentication, openid, spring, java
VIEW REPOSITORY **CHOOSE**

Golang-accelerator ☆
Clean Golang environment ready to code.
Tags: go, golang, web
VIEW REPOSITORY **CHOOSE**

f(x) Java Function ☆
A FaaS Java function powered by Function Buildpacks for Knative.
Tags: beta, java, spring, function, serverless, knative, faas
VIEW REPOSITORY **CHOOSE**

Tanzu Java Restful Web App ☆
A Spring Boot Restful web application including OpenAPI v3 document generation and database persistence, based on a three-layer architecture.
Tags: java, spring, web, api, postgresql, tanzu
VIEW REPOSITORY **CHOOSE**

Tanzu Java Web UI ☆
Spring Boot application with server side rendered web UI. Application supports single sign-on (SSO) via Spring Security OAuth 2 Client library.
Tags: java, spring, web, tanzu, appssso, oidc
VIEW REPOSITORY **CHOOSE**

Node Express ☆
A Node.js sample app using Express
Tags: node, express, tanzu
VIEW REPOSITORY **CHOOSE**

f(x) Node Function ☆
A FaaS Node.js sample function using FaaS Node.js Runtime Framework.
Tags: beta, node, function, serverless, knative, faas
VIEW REPOSITORY **CHOOSE**

python-accelerator ☆
Clean Python environment ready to code.
Tags: python, streamlit, web
VIEW REPOSITORY **CHOOSE**

- Templates for Apps, Baselines etc.
- Can be “anything”
- Takes input
- Customizable using Sed, YTT, etc.

Supply Chain

golang-demo

Supply Chain: source-test-scan-to-url
Supply Chain Cluster: host
Delivery Cluster: host

Stage Detail: Source Tester
a day ago

Overview

Name: golang-demo
Kind: Runnable
Version: carto.run/v1alpha1
Namespace: default

Tests

Id	Age	Duration	Message	Status
6b75d15d-5419-43b9-8653-408d9761d741	a day ago	31s	Tasks Completed: 1 (Failed: 0, Cancelled 0), Skipped: 0	Success
6c31e029-95ae-447f-b017-b88c23e18e58	a day ago	30s	Tasks Completed: 1 (Failed: 0, Cancelled 0), Skipped: 0	Success
3d90b4ea-3ae4-4c25-90b3-9ab9f8394c39	a day ago	6s	Tasks Completed: 1 (Failed: 0, Cancelled 0), Skipped: 0	Success

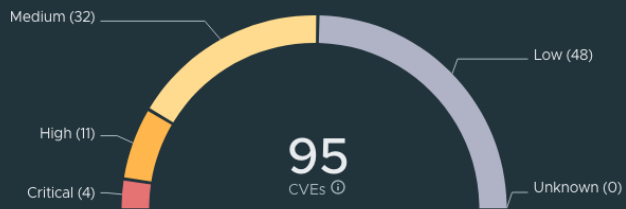
- Supply Chain UI
- CVE info
- Test info
- Overview

Security Analysis

Security Analysis

An analysis of vulnerabilities discovered in workload builds

Vulnerabilities by Severity



Workload Build Vulnerabilities

Violates Policy Does Not Violate Policy 4

Name	Namespace	Cluster	Last Scan Completed	CVEs
fastapi-test	default	host	5 days ago	1 Critical, 4 High, 8 Medium, 12 Low
golang-demo	default	host	a day ago	7 Medium, 12 Low
nl-prod-tanzu-java-web-app	default	host	11 hours ago	2 Critical, 3 High, 7 Medium, 12 Low
python-test	default	host	11 days ago	1 Critical, 4 High, 10 Medium, 12 Low

- Security overview

Built with an open source-first mindset

Innovative, interoperable, scalable and secure solutions

Tanzu Application Platform is backed by some of the most mature and popular open-source projects available today

In addition to Backstage



Garnering 200+ plugins Backstage has gained tremendous traction by helping organizations build self-service developer portals



Developers build, deploy, and manage their own apps and package them so they are more easily distributable



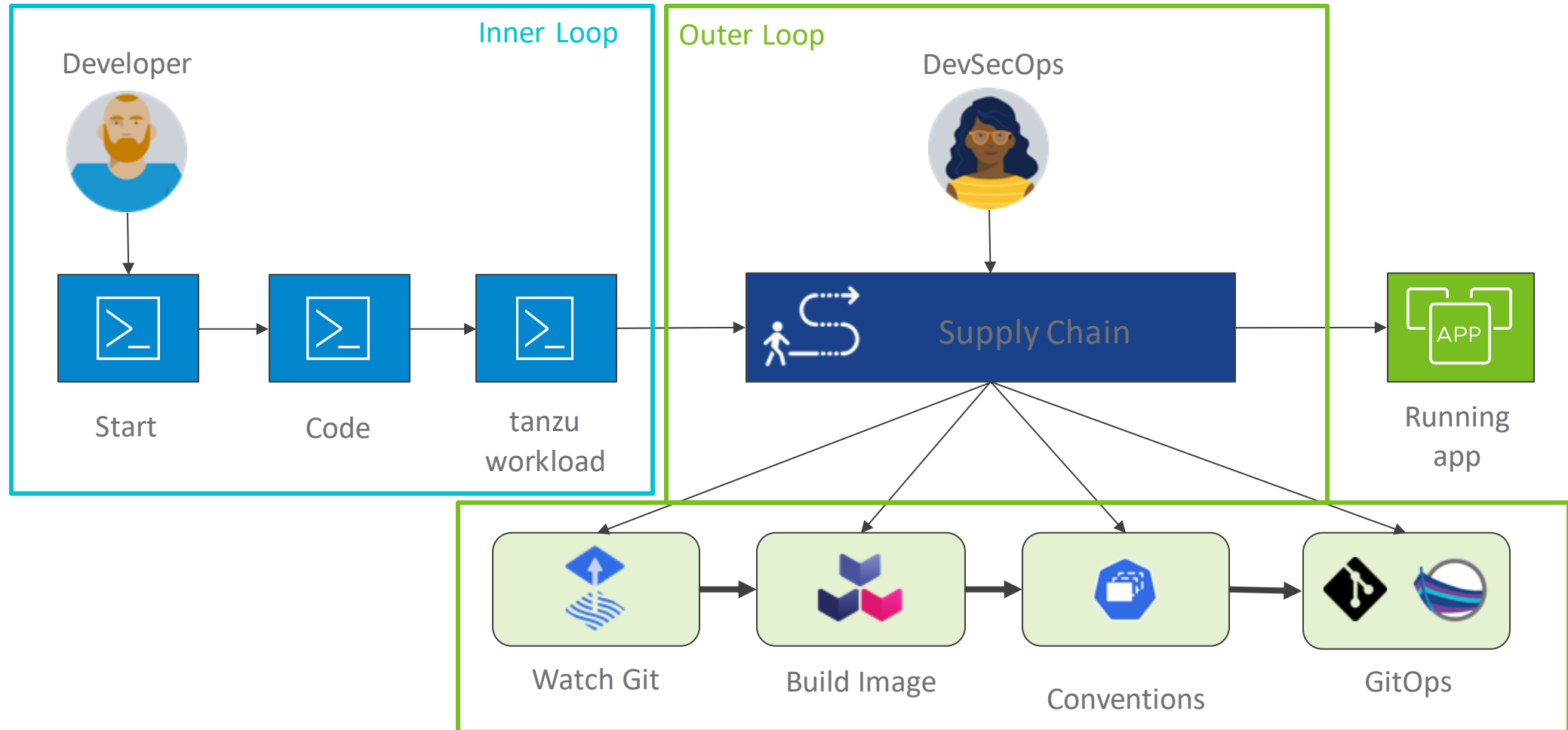
Operator teams create secure, reusable supply chains that define all of application CI and CD in one place

And many more....



Building open-source software and contributing to communities is at the core of VMware's engineering spirit

Deploying an App with Tanzu Application Platform



Demo



Q&A

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Tanzu Application Platform : <https://tanzu.vmware.com/application-platform>

NerdOut Podcast : <https://open.spotify.com/show/5eXZwvvt3K2dxha3BSaAe>

Spotify Golden Path : <https://engineering.atspotify.com/2020/08/how-we-use-golden-paths-to-solve-fragmentation-in-our-software-ecosystem/>

Kubernetes : <https://kubernetes.io>

CNCF : <https://www.cncf.io>

Tanzu : <https://tanzu.vmware.com>

Register for next event on
<https://webinars.tanzu.dk>

Recording / Slides will also be available there.

