

## Connect

GitOps: l'approccio open source  
integrato per la resilienza, automazione  
e sicurezza dei workload

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# Business objectives

The Tree of Taste company

- ▶ Reduce the Time to Market
- ▶ Support the business dynamically and proactively during peak seasons
- ▶ Security as an essential element to win customers' trust and protect the brand

You are here



## Journey to modernization - 1st phase

- Legacy Application Modernization
- Break down the Monolith
- Converge to PaaS and Cloud Services models



## Journey to modernization - 2nd phase

- Integrated approach to application and infrastructural resilience through the use of multi-cluster solutions
- Focus on application automation to speed up release process
- Focus on a pervasive security model from application development, release and deployment process

# Adopting a Cloud Native Approach

## Top Objectives



### Speed

Increase developer productivity and ship quality applications faster

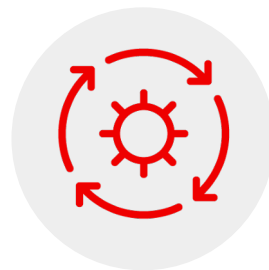
DevOps



### Security

Application and supply chain security from start to production

DevSecOps



### Scale

Automate and scale application delivery on hybrid cloud infrastructure

GitOps

# Continuous Integration(CI) & Continuous Delivery (CD)

A key DevOps principle for automation, consistency and reliability



**DevOps** is the key to meet the insatiable demand for delivering quality applications rapidly

# DevSecOps

Kubernetes is the standard for application innovation...



- ▶ Microservices architecture
- ▶ Declarative definition
- ▶ Immutable infrastructure

...and Kubernetes-native security is increasingly critical



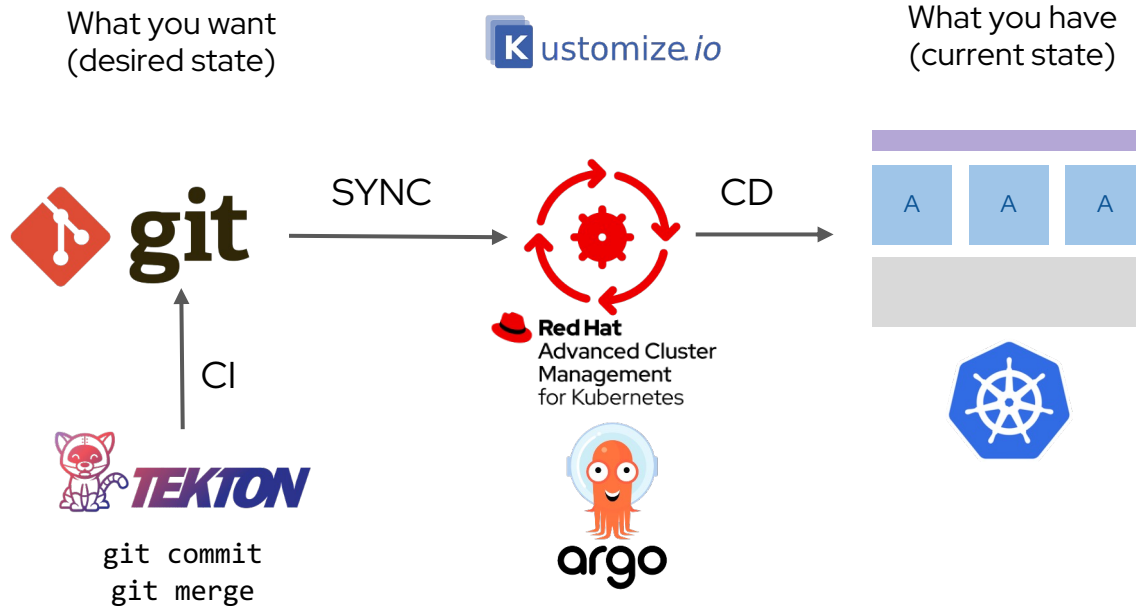
- ▶ Secure supply chain
- ▶ Secure infrastructure
- ▶ Secure workloads



**Zero trust** is an approach to designing security architectures based on the premise that every interaction begins in an untrusted state

# GitOps Workflow

a declarative approach to application delivery



Scope: Automate a Continuous Delivery chain

# Adoption of DevSecOps and GitOps practices

## OpenShift Pipelines

Kubernetes-native on-demand delivery drive all the pipeline



## Shift Left

### OpenShift Build

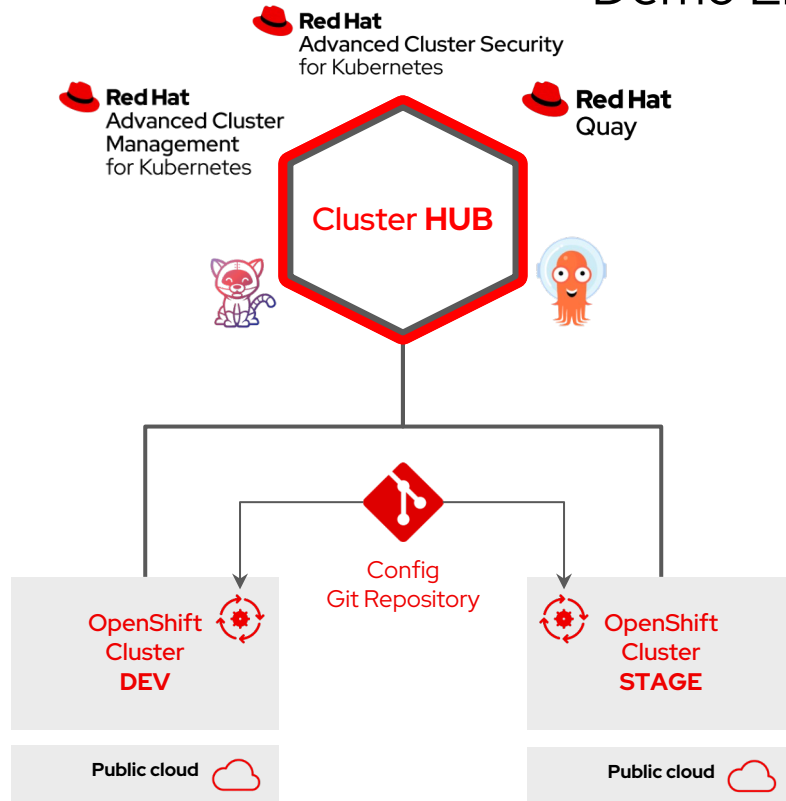
Automate building container images using Kubernetes tools



### OpenShift GitOps

Declarative GitOps for multi-cluster continuous delivery

# Demo Environment



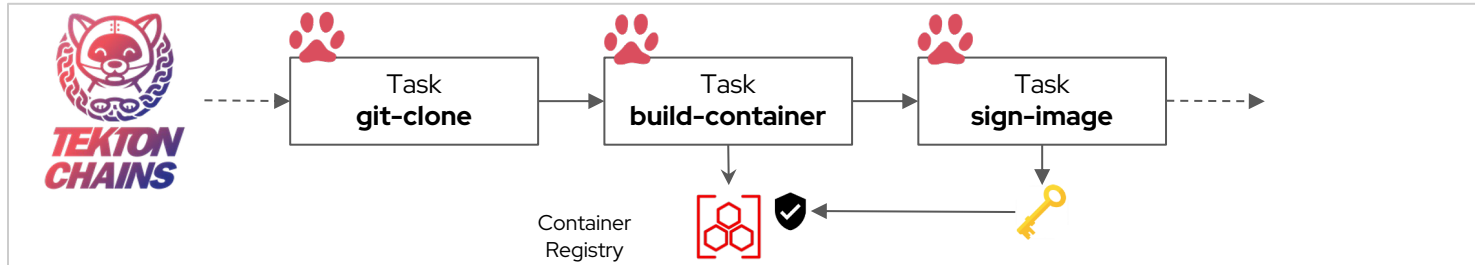
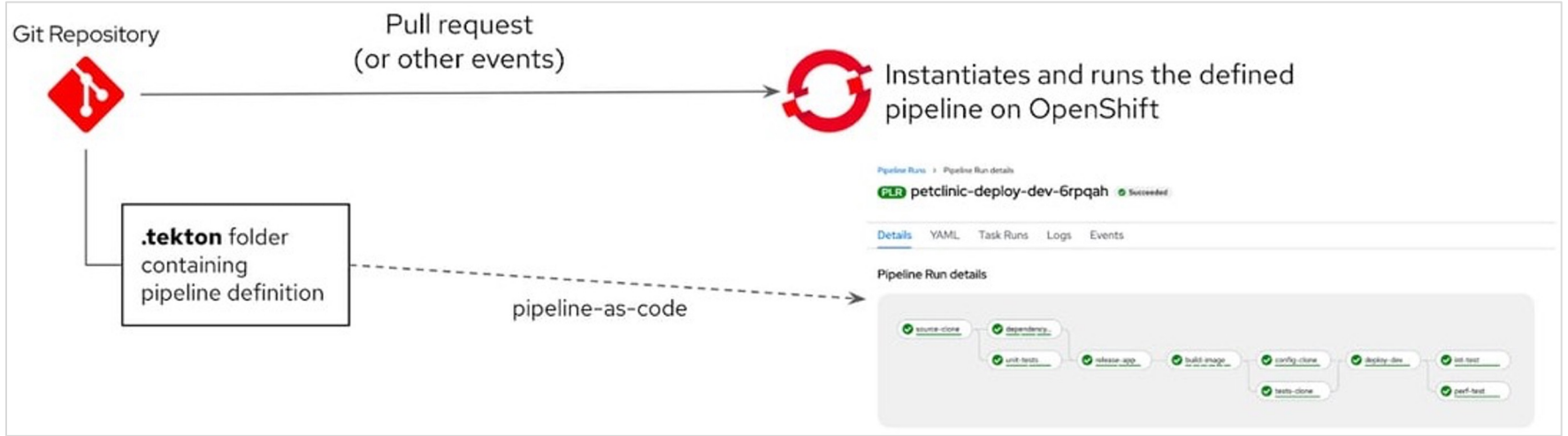
- The first cluster is the **Cluster Hub** and contains all the tools and capabilities to drive the pipeline in a DevSecOps approach
- The other **two managed clusters** were already deployed on Cloud and represent development and stage environments



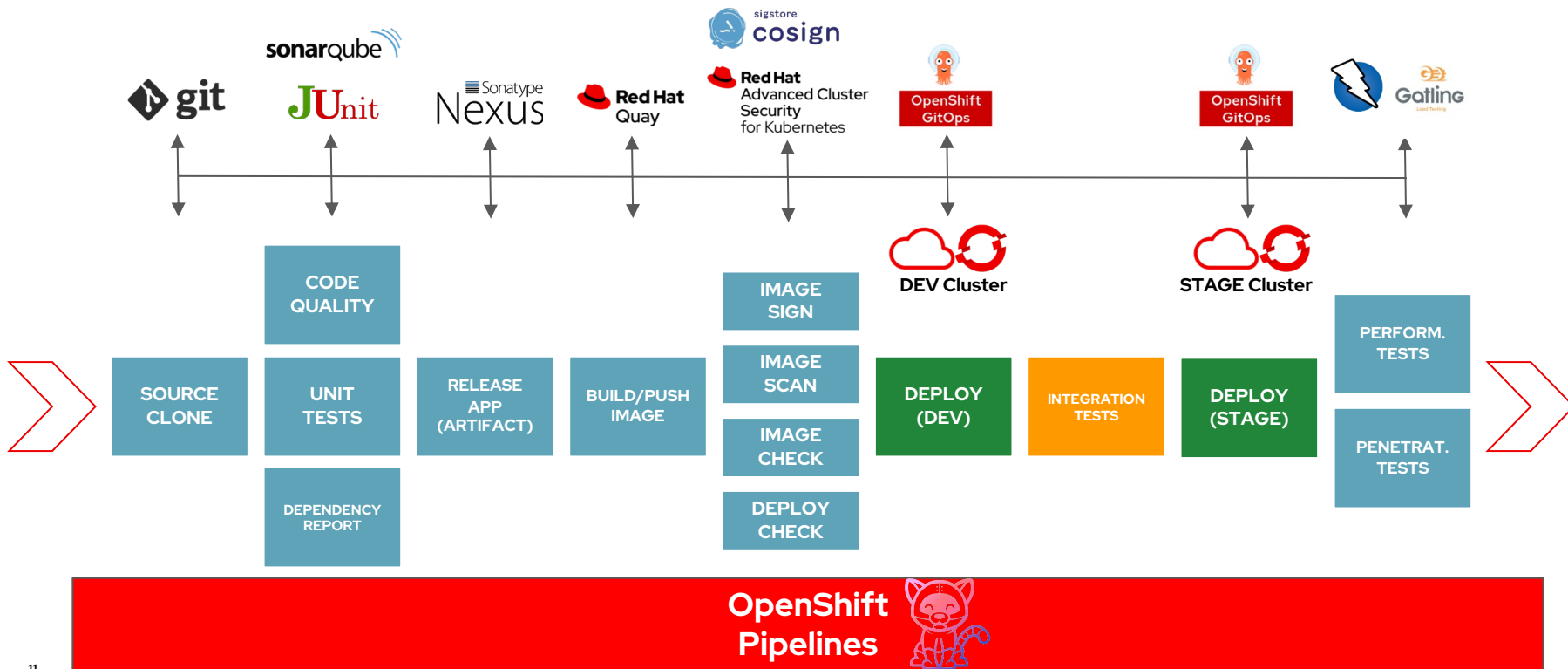
# Hands-on Environment

# Technical Preview Features

## Pipelines as Code and Tekton Chains



# Pipeline Implementation



# Hands-on Pipeline as code

# Recap and Benefits

- ▶ E2E automation in supply chain from development, to build and to deploy
- ▶ DevOps and Security teams can use a common language and source of truth
- ▶ Diversify infrastructure in order to reduce costs, avoid vendor lock-in and increase agility
- ▶ Adherence to corporate compliance through centralized governance over distributed environments
- ▶ Control and reduce the risk of drift between the desired and current state of infrastructures and / or applications

## CUSTOMER BENEFITS



Compliance  
and risk  
management



Developer  
productivity



Automated  
Security