Red Hat Summit

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

Tree of Taste

- 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

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Adopting a Cloud Native Approach

Top Objectives

Speed

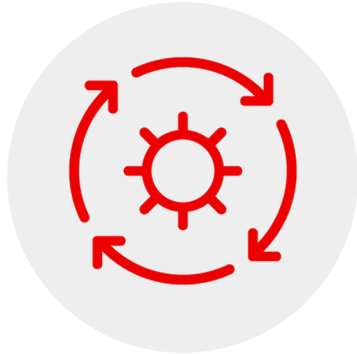
Increase developer productivity and ship quality applications faster

DevOps

Security

Application and supply chain security from start to production

DevSecOps



Scale

Automate and scale application delivery on hybrid cloud infrastructure

GitOps

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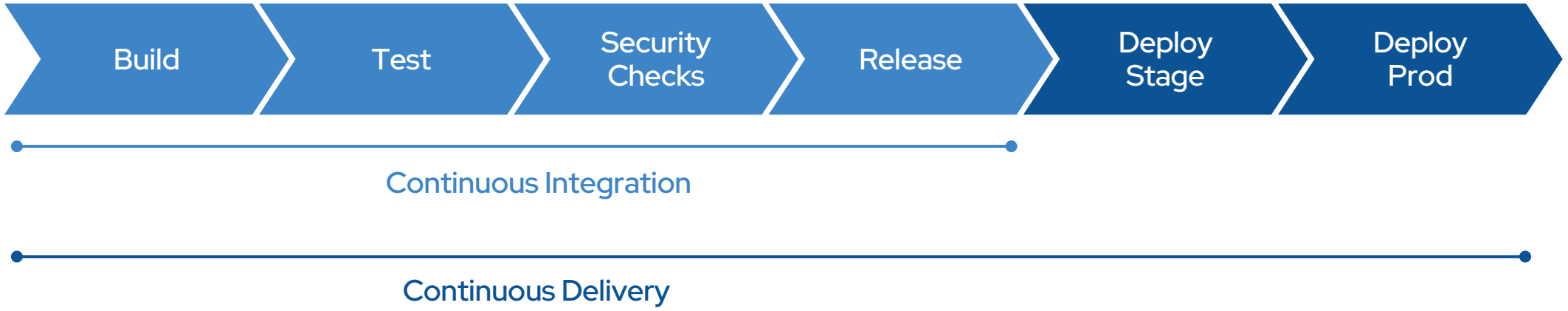
Continuous Integration(CI) & Continuous Delivery (CD)

A key DevOps principle for automation, consistency and reliability



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

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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

DevOps | DevSecOps | Security

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

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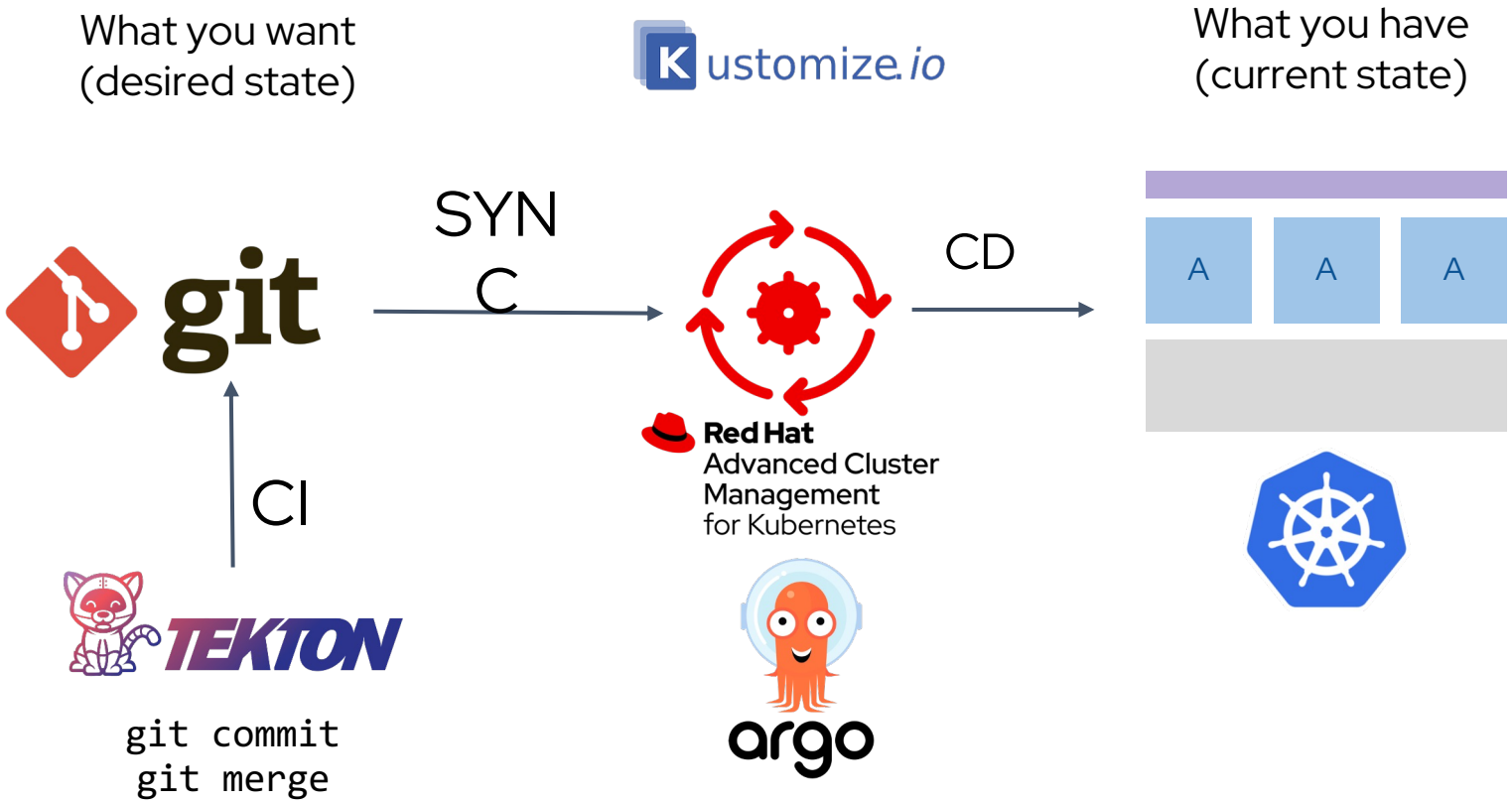
GitOps Workflow

a declarative approach to application delivery



Scope: Automate a Continuous Delivery chain

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Adoption of DevSecOps and GitOps practices

OpenShift Pipelines

Kubernetes-native on-demand delivery drive all the pipeline

OpenShift Build

Automate building container images using Kubernetes tools

Red Hat Advanced Cluster Security for Kubernetes

OpenShift GitOps

Declarative GitOps for multi-cluster continuous delivery

Ecosystem Integrations

GitHub GitLab Azure DevOps Travis CI

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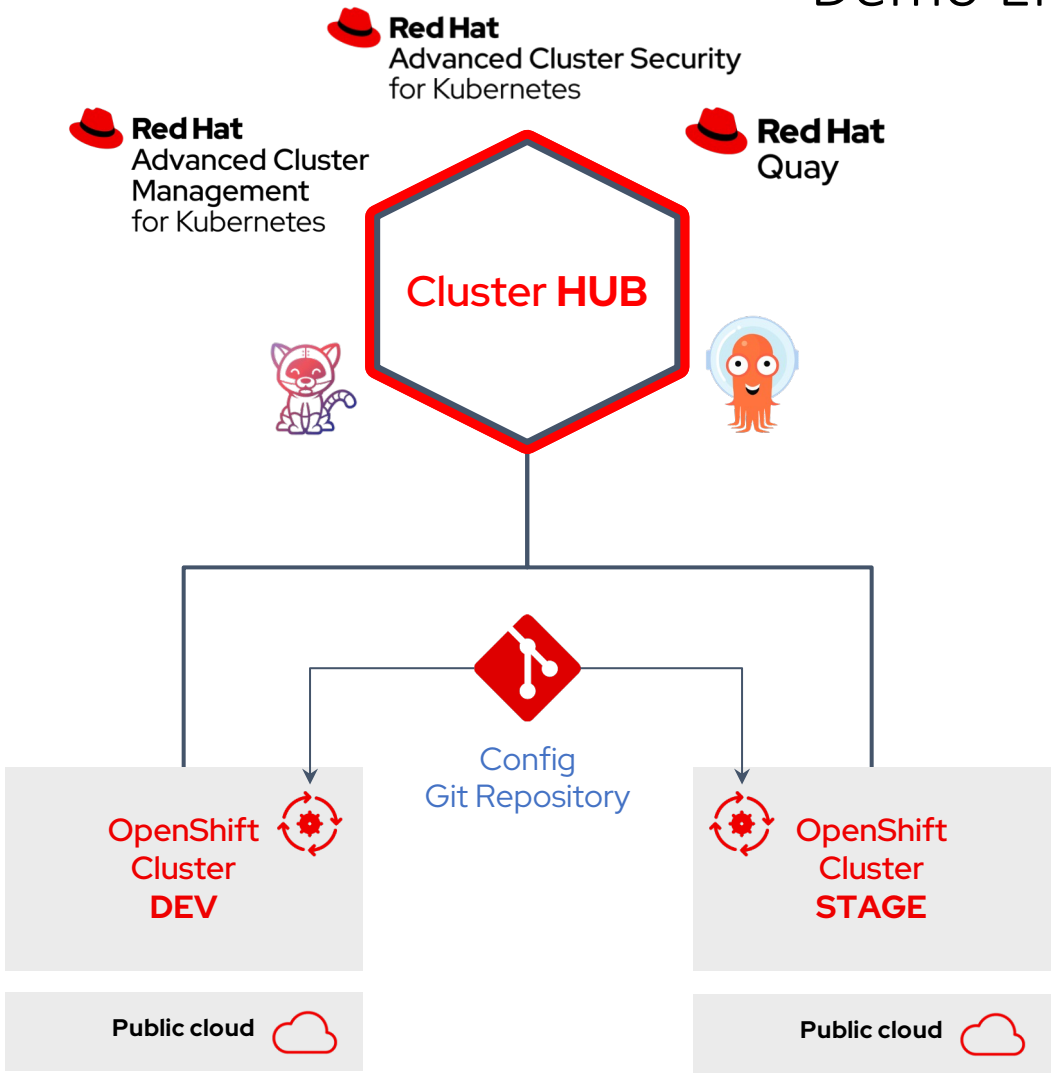
Demo Environment



- 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

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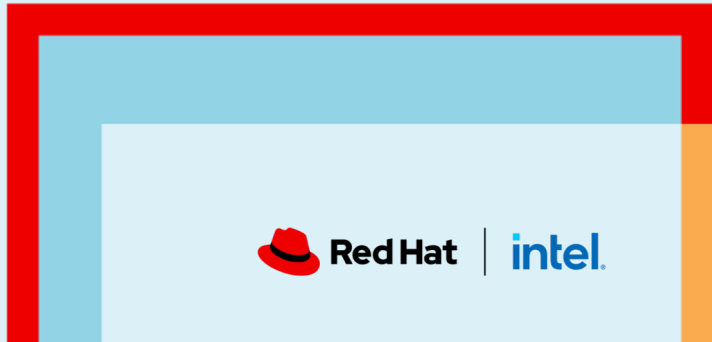
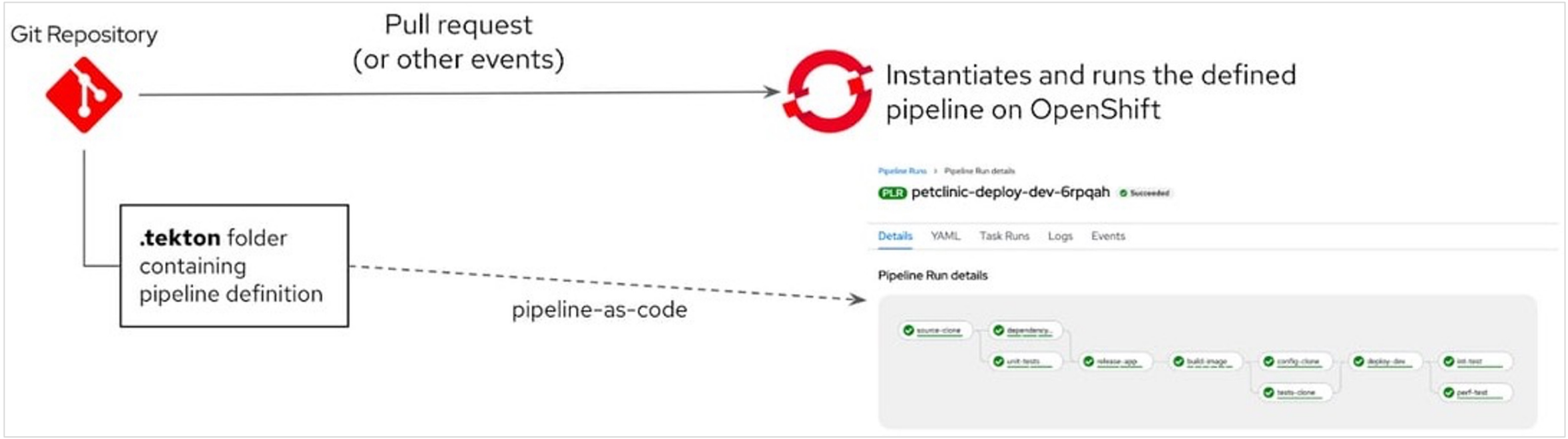
Hands-on Environment

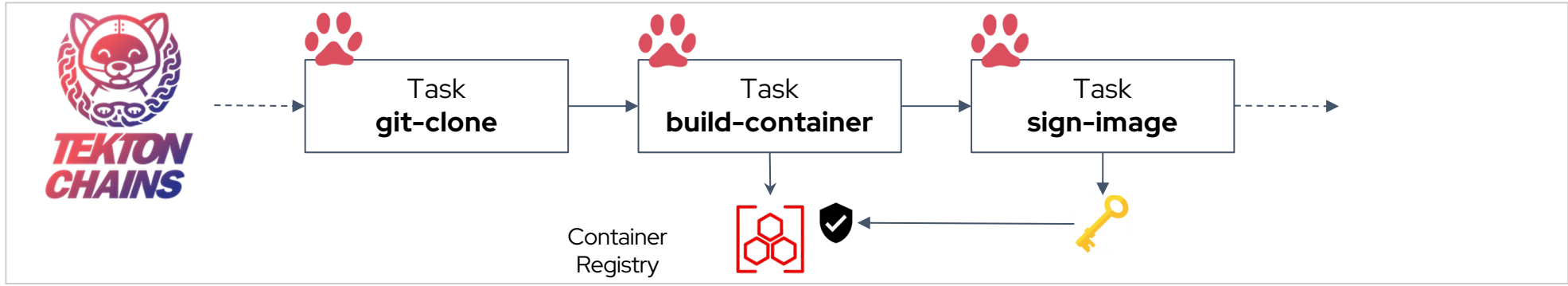


Tech Preview

Technical Preview Features

Pipelines as Code and Tekton Chains





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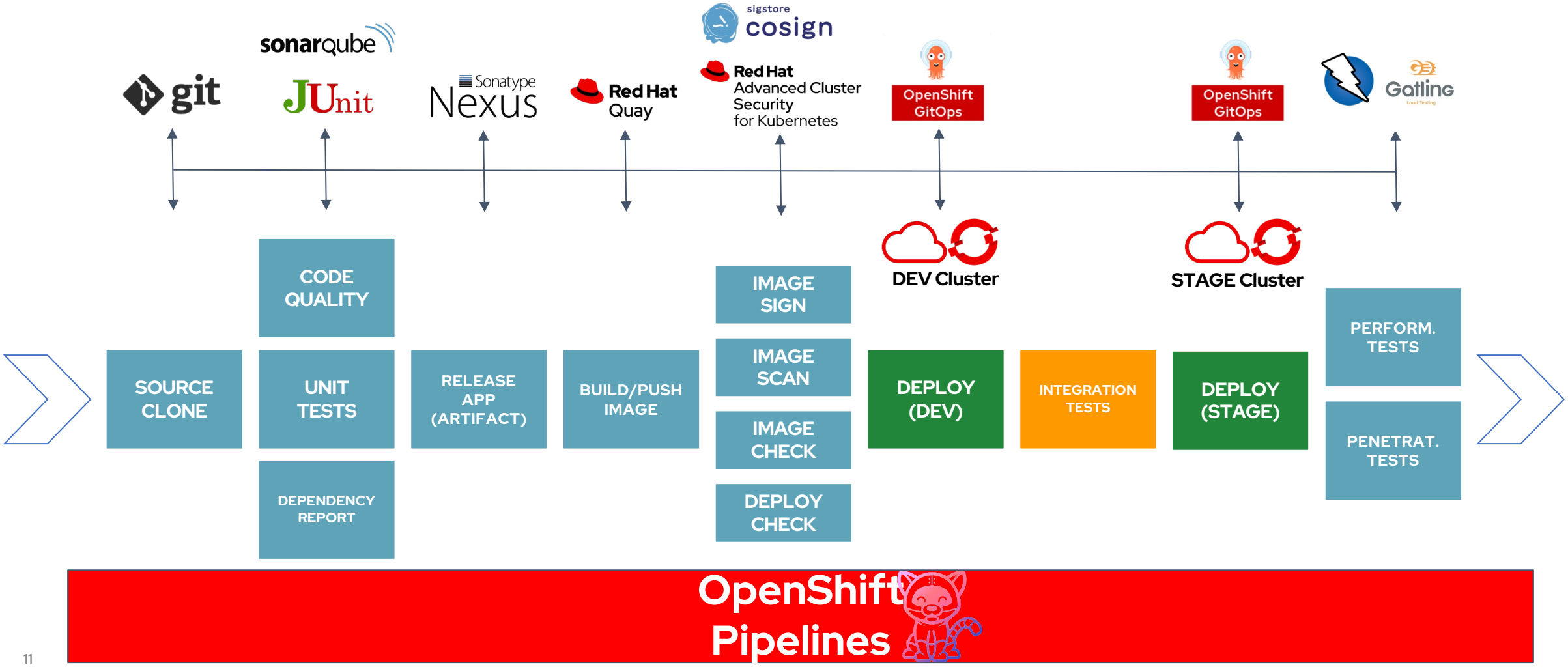
Pipeline Implementation



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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

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