Updated 07/27/2023

Sign up

Tekton training : Building Kubernetes-native pipelines

2 days (14 hours)

Presentation

Tekton training will enable you to use a powerful and flexible open-source framework to create CI/CD systems. Your team will be able to test, build and deploy between on-premise systems and cloud providers. This course will help you understand the languages and deployment environment. Tekton technology works equally well with Jenkins, Jenkins X, Knative, Skaffold and other popular CI/CD tools. Flexible, with this tool you can choose your build, deployment or test workflow according to your team's needs. Tekton installs and runs as an extension on a Kubernetes cluster. You'll use the Tekton pipelines available through the kubectl command line. As with all our training courses, this one will introduce you to the latest stable version of Tekton (at the time of writing Tekton v0.15).

Objectives

- Understanding the Tekton environment
- Mastering key Tekton concepts
- Creating and using pipelines with Kubernetes
- Define highly detailed building blocks

Target audience

- DevOps
- Engineers
- Developers

Prerequisites

Kubernetes basics.

Tekton Training Program

Tool introduction

- A reminder of DevOps
- The difference between DevOps and CI/CD
- What is a Kubernetes CRD?
- Introducing Tekton
- Installation
  - Installing Kubernetes with minikube
  - Autocomplete installation
  - Data persistence
- Tekton components
- Overview
- First steps

Tasks and pipelines

- Creating a task
  - Task
  - TaskRun
  - Authentication
- Creating a pipeline
  - Pipeline execution
  - Creating pipeline resources
- Using labels
- Displaying logs
- Migration from Tekton valpha1

Triggers and EventListeners

- Triggers
  - Operation and implementation
  - Installation
  - Creating a TriggerBinding
  - Link between TriggerBinding and TriggerTemplate
- EventListeners
- CEL expression extensions

Interceptor

- Interceptor configuration
- Namespace interceptors

Security

- Authentication for channels
- Introducing Supply Chain Security

Tekton Dashboard

- PipelineRun and TaskRun overview in real time
- Using filters
- Import resources
- Using extensions

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.