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Sign up

KOps training: Developing cloud applications with Kubernetes

2 days (14 hours)

Presentation

Our **Kubernetes Operations (KOps)** training course will teach you how to use complex Kubernetes components and high-availability components. This course is aimed at developers and Devops wishing to integrate KOps into their continuous delivery and testing processes for cloud-native applications.

KOps is an open source solution for complex cluster configurations. It lets you create and manage production-ready, highly available Kubernetes clusters. It is a popular tool for developers wishing to integrate Kubernetes into a [cloud solution, thanks to its](#) ease of use.

In this training course, you will learn how to install and configure the tool for development. You'll learn fundamental KOps concepts and how to use the application delivery and testing processes.

This training will run on Kops [version 1.25](#), the latest stable release.

Objectives

- Installing and configuring KOps
- Using APIs
- Using KOps for everyday tasks

Target audience

- DevOps engineers
- Developers

Prerequisites

- Knowledge of Kubernetes and YAML files
- Knowledge of Linux

Kubernetes Operations training program

Install KOps

- Installing Kubernetes add-ons
- Migrating from Kub-up to KOps
- Cluster options
- Cluster configuration
- Applying KOps to existing environments

Architecture

- Similarities with Kubectl
- Configurations and operational tasks
- Network topology
- Integration with Gitops technologies
- Line-control interface

Configuration

- Kubectl and KOps cluster
- CLI commands
- Experiences
- YAML
- Instance groups

Using APIs

- KOps API configuration
- PLC values
- Component customization
- Customize YAML registers via APIs
- Add functions

Operational tasks

- Cluster management
- Template configuration
- GPU
- High-availability components
- High-availability masters

Deployment & security

- Node management
- Cluster management
- Bastion configuration
- Using HSS access
- Creating private clouds

Companies concerned

This 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.