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Sign up

Pulumi training: Managing the versioning of your infrastructure

2 days (14 hours)

Presentation

Our Pulumi training course will enable you to describe and manage cloud infrastructure using code. Unlike other cloud deployment tools, Pulumi provides a unified interface for different clouds such as AWS, Azure and Google Cloud.

In this course, aimed at system administrators and developers wishing to improve their cloud deployment skills, you'll learn about the main concepts of Pulumi, such as resources, configurations and packages. You'll also learn how to describe and deploy applications on the cloud.

This 2-day training course will introduce you to the Pulumi platform and its entire ecosystem. You'll learn how to install and use the development environment.

You'll also discover the API for different clouds and how to deploy and update applications on the cloud with Pulumi.

As with all our training courses, this one will introduce you to the latest version of Pulumi (at the time of writing: Pulumi 3.54.0).

Objectives

- Understanding key Pulumi concepts
- Define, deploy and manage infrastructure
- Implement development and operating practices

Target audience

- Developers
- Architects
- DevOps

Prerequisites

Knowledge of software deployment.

Our Pulumi Training Program

Introduction

- What is Pulumi?
- Why use Pulumi?
- Comparing Pulumi to other cloud deployment tools
- Introduction to the development environment
- The main concepts
  - The resources
  - Packages
- Configuration
- Understanding batteries
- LinuX / MacOS / Windows
- Installation with a script
- Manual installation

Building applications in the cloud

- Cloud infrastructure with code
- Pulumi API on different clouds
  - AWS
  - Azure
  - Google Cloud
- Deploying and updating applications
- [PRACTICE] Deploying a basic application on AWS
- Debugging features
- Deployment follow-up

Status and secrets management

- Manage deployment status
- Managing secrets securely
- Using secrets and deployments
- [PRACTICE] Deploying an application with state and secret management

Automation and continuous integration

- Integrating Pulumi into software delivery pipelines
- Deployment automation
  - Best practices
- [PRACTICE] Configuration of a delivery pipeline

Advanced use

- Advanced features
  - Modules
  - Packages
- Third-party tools and services
- [PRACTICE] Deploying a complex application with modules and packages

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.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

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.