

Terraform Advanced Training

2 days (14 hours)

Presentation

Perfect your infrastructure management with Terraform. Infrastructure As Code (IaC) allows you to automate the maintenance of your systems, so you can [deploy faster](#) and ensure the quality of your projects.

Terraform is an essential tool for increasing the productivity of your infrastructure teams. This software environment automates infrastructure construction, including network, compute and storage resources...

The Terraform community has designed over 1,000 providers to manage your infrastructure on Amazon Web Services (AWS), Azure, Google Cloud Platform (GCP)...

This advanced training course designed for experienced Terraform users. You'll learn how to optimize its use in complex project situations.

Our Terraform Advanced training course will introduce you to the latest version of Terraform: [Terraform 1.10](#).

Objectives

- Be autonomous on Terraform projects (existing infrastructure or not)
- Get ready for Terraform Associate certification

Target audience

- DevOps
- SRE

- System administrators

Prerequisites

- Good knowledge of Infra resources (compute, storage, network...)
- Good knowledge of a Cloud Provider (AWS in particular)
- Basic knowledge of Terraform or have taken our [Terraform training course](#)
- Terminal and SSH connection or Terraform and AWS CLI installed
- [Test My Knowledge](#)

Terraform Advanced training program

Definitions and key concepts

- Terraform
- Infrastructure
- Cloud Provider
- IaaS
- Declarative programming
- Infrastructure as Code

Terraform reminder

- Terraform history
- CLI and subcommands
- Terraform Apply process

Configuration

- Complete installation
- Terraform Providers
- Terraform Backends
- Terraform Variables
- Git repository

HCL code organization

- Terraform Module
- Terraform Resources
- Terraform Data

- Terraform Output
- Terraform Variables
- Terraform Locals
- Terraform Functions
- Terraform Console
- Dynamic expressions

Terraform at work

- Enterprise project contexts where Terraform is most appropriate
- Terraform Automation
- Terraform CI/CD

Security

- Definitions
- Best practices for securing your infrastructure
- Securing your state files
- Evaluate the reliability of your infrastructure and deployments

Case studies

- Setting up a new infrastructure with Terraform
- Importing an existing infrastructure into Terraform
- Sharing other possible scenarios

Further information

- Some useful plug-ins
- Contributing to the environment

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 on entry to training complies with Qualiopi quality criteria. As soon as registration is confirmed, the learner receives a self-assessment questionnaire which enables us to

assess their estimated level of proficiency in different types of technology, and their 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) that 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, 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.