

Course : Terraform on AWS

Create and manage infrastructures automatically with Terraform

Practical course - 4d - 28h00 - Ref. TE1

Nouvelle édition

With this training course, you'll learn the concepts and standards of Infrastructure as Code (IaC). You'll familiarize yourself step-by-step with Terraform terminology and standard and advanced concepts, supported by best practices drawn from the instructors' own experience, and "Hands-on" labs to put what you've learned into practice.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understanding Infrastructure as Code (IaC) and HashiCorp Terraform
- ✓ Learn and practice basic and advanced Terraform commands
- ✓ Learn how to use Terraform state and loops
- ✓ Learn to work in a multi-stack environment in Terraform
- ✓ Understanding Terraform's CI/CD workflow
- ✓ Learn and practice building modules in Terraform
- ✓ Learn more about providers, variables, provisioners and dependencies in Terraform
- ✓ Learn and apply Terraform best practices
- ✓ Discover Terraform's complementary tools

Intended audience

Developers, architects, system administrators, DevOps.

Prerequisites

Basic knowledge of AWS cloud and Unix systems.

Practical details

Teaching methods

Training in French. Official course material in English and digital format. Good understanding of written English.

Course schedule

PARTICIPANTS

Developers, architects, system administrators, DevOps.

PREREQUISITES

Basic knowledge of AWS cloud and Unix systems.

TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

ASSESSMENT TERMS

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

1 Discover IaC

- Understanding Infrastructure as Code (IaC).
- Introduction to Terraform and HCL (HashiCorp Configuration Language).
- Terraform overview: provider, resource, datasource, variable and output.
- Understand and build a Terraform lifecycle tailored to your application.

Hands-on work

Perform basic Terraform commands. Manage a Terraform state and practice with it.

2 Getting started with IaC

- Practicing with Terraform using best practices.
- Building a Terraform stack.
- Teamwork with Terraform (backend, tfstate and lock).

Hands-on work

Create Terraform loops. Isolate your Terraform stack with workspaces and backends.

TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training course.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: psh-accueil@orsys.fr so that we can assess your request and its feasibility.

3 Mastering IaC

- Discover the Terraform workflow in a CI/CD.
- Learn to solve your Terraform's problems.
- Learn how to configure the Terraform CLI.

Hands-on work

Build and link multiple Terraform stacks (multi-stack). Build a Terraform module.

4 Going deeper into IaC

- Deep dive on provider, variable, provisioner & dependencies.
- Introduction to advanced commands in Terraform.
- Best practices with Terraform.

Hands-on work

Introduction to Terraform's complementary tools, with practical exercises.