

Terraform – Automation of infrastructure deployment

2journs / 14h

Target audience

This training is for any technical profile wishing to discover or deepen their knowledge of the tool

Course Outline

1. Introduction to Terraform
 - HashiCorp and product ecosystem
 - Terraform history
 - Major versions of Terraform
2. Getting started with Terraform
 - Installation
 - Configuration
 - Software discovery
 - Workshop: Installation and configuration
3. Languages
 - “HCL”: HashiCorp Configuration Language
 - Variables, resources, providers and outputs
 - Resource life cycle
 - “HIL”: HashiCorp Interpolation Language
 - Expressions
 - Functions
 - Loop and conditions

- Workshop: First deployment of infrastructure
- Workshop: Advanced use of interpolations
- 4. Configuration of the development environment
 - Implementation of development aid
 - Automatic generation of documentation
 - File management and best practices
 - Workshop: Configuration of the development environment
- 5. Test strategy
 - Overview of the different test tools
 - The example of inspec, inspec-iggy and kitchen-terraform
 - Workshop: Continuous Integration with Terraform
- 6. Cooperative work
 - Re-use of code, discovery of modules
 - Management of competition and persistence
 - Credential management
 - Workshops: Creation of a module register in gitlab
- 7. Use in production
 - Manipulation of the state file
 - Continuous deployment via Gitlab-ci
 - Presentation of the offer for Terraform Cloud companies
 - Development and use of community providers
 - Workshops: Continuous Deployment via Terraform