[sfeir] Institute

SFEIR Institute, SFEIR Institute | TERRAFORM

Terraform – Automation of infrastructure deployment

2 jour(s) / 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-terrraform
    - 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