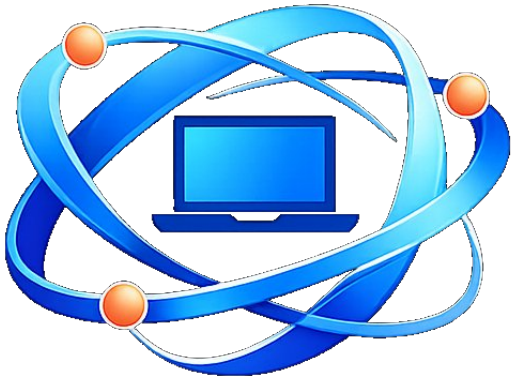

MFE-IT

Reference: 2B/EN/TER

Terraform Training Course

Develop Practical Expertise in Infrastructure Automation with Terraform

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Duration: 2 Days | Hours: 14 h

Remote · Sessions guaranteed from 1 registrant · 60% hands-on practice

DESCRIPTION

Terraform has become an essential standard for automating the deployment and management of cloud or hybrid infrastructures. Its declarative approach allows you to version your infrastructure, share it and maintain it using the same best practices as for application code.

You will learn how to define your resources, deploy them securely, and integrate them into a CI/CD pipeline for consistent and reproducible management of your cloud environments.

LEARNING OBJECTIVES

By the end of this training course, participants will be able to:

- Understand the key concepts of Terraform and Infrastructure as Code
- Write, version control and reuse modular Terraform code
- Deploy resources on different providers (AWS, Azure, GCP)
- Use backends, workspaces and state management rigorously
- Integrate Terraform into CI/CD pipelines for complete automation
- Apply best practices for security, testing and collaboration

PREREQUISITES

- Proficiency with command line (Linux, macOS or Windows)
- Basic knowledge of cloud administration (AWS, Azure or equivalent)
- Basic knowledge of scripting or system configuration

> *Because each participant is unique, a personalised interview is systematically organised in advance with our expert to design a training programme perfectly aligned with their objectives, level and professional challenges.*

TARGET AUDIENCE

DevOps engineers, SREs, cloud administrators and developers involved in operations.

DETAILED PROGRAMME

> The training alternates between theoretical input and hands-on practice (approximately 60% of the time). Modules are built around practical exercises based on real-world business use cases.

Module 1 – Introduction to Terraform and IaC

- Infrastructure as Code principles and benefits
- Terraform architecture: providers and resources
- HCL blocks and basic syntax

Module 2 – Writing and executing Terraform code

- Creation of .tf files
- init, plan, apply and controlled deletion
- Resource lifecycle management

Module 3 – Advanced structuring

- Variables, outputs and .tfvars files
- Custom modules and code factorisation
- Dynamic resource creation

Module 4 – State, backends and workspaces

- Terraform state and remote backends (S3, Azure Blob)
- State locking and concurrency
- Workspaces and environment organisation

Module 5 – Safety and best practices

- Securing secrets and integration with HashiCorp Vault
- Versioning management and team conventions
- Linters, validation and testing (tflint, checkov)

Module 6 – Multi-cloud case study

- Deployment of resources on AWS or Azure
- Reusable modules and per-environment logic (dev/stage/prod)
- CI/CD integration with GitHub Actions or GitLab CI

TEACHING METHODS

Format and Delivery

The training is delivered remotely via an interactive virtual classroom. It can also be delivered on-site, with content customised to match the needs of your professional project. The theory/practice split is approximately 40%/60%.

MFE-IT Ultra-Personalised Format

Each session accommodates between 1 and 3 participants, ensuring highly individualised support. A preliminary interview allows us to tailor the content to each participant's profile. Inter-company sessions are guaranteed from just 1 registrant (except in cases of force majeure).

Skills Assessment

Throughout the training, the trainer assesses participant progress through multiple-choice questions, role-playing exercises and hands-on work. At the end, a certificate of achievement is issued to each participant.

Post-Training Support

For one month following the training, each participant can contact MFE-IT trainers with questions about implementing acquired knowledge. A response is provided by email or telephone within 48 working hours.

Accessibility

MFE-IT is committed to welcoming people with disabilities. Contact: contact@mfe-it.com.

PRACTICAL INFORMATION

Trainer Resources

- Structured demonstrations aligned with the detailed programme
- Exercise briefs and solutions throughout the training
- A ready-to-use technical environment for practical workshops
- Trainer validation of acquired knowledge at the end of each workshop
- Digital reference documents

Certification and Validation

At the end of the training, a certificate is sent by email specifying the objectives, nature, duration and assessment results. A completion certificate can also be provided on request.

Benefits for Participants

- Train from your workplace or home, with no travel required
- Benefit from an expert trainer-consultant on the subject
- Enjoy an ultra-personalised format (1 to 3 participants)
- Continue training even in the event of unforeseen circumstances

Benefits for the Organisation

- Optimise the training budget by reducing travel and accommodation costs
- Offer quality training to all employees, regardless of location
- Reduce absence time linked to travel
- Support team upskilling in all contexts