



MFE-IT

Reference: 2B/EN/ANS

Ansible Training Course

Master DevOps Automation from Configuration to Continuous
Integration

Duration: 4 Days | Hours: 28 h

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

DESCRIPTION

In a modern DevOps context, automation is no longer an option: it is a prerequisite for fast, efficient and error-free delivery. Ansible — an open-source IT automation tool — allows you to configure servers, deploy applications, orchestrate tasks and integrate your CI/CD processes in an agentless, declarative, simple and robust manner.

Through this 4-day programme, you will learn how to automate your infrastructures, from getting started to advanced integration of Ansible into a DevOps workflow. You will discover how to create effective playbooks, structure inventories, roles and variables, and execute your automations continuously using GitLab CI, Jenkins or any other integration system.

LEARNING OBJECTIVES

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

- Understand the fundamentals of automation with Ansible
- Create effective, reusable and organised playbooks (roles, variables, handlers)
- Automatically deploy packages, configuration files and services
- Manage complex environments via dynamic inventories
- Integrate Ansible into a CI/CD pipeline with GitLab, Jenkins or GitHub Actions
- Apply best practices for security, structuring and versioning

PREREQUISITES

- Basic knowledge of Linux administration and command line
- Familiarity with DevOps concepts (CI/CD, infrastructure as code)
- Experience in an integration or deployment project appreciated

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, sysadmins, platform engineers and SRE developers who want to standardise and secure their deployments.

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 Automation and Ansible

- Ansible architecture and agentless operation
- YAML basics and first playbooks
- Comparison with Puppet, Chef and SaltStack

Module 2 – Structure and best practices

- Roles, variables and handlers
- Jinja2 templates
- Reusability and modularity

Module 3 – Inventory management

- Static and dynamic inventory
- Groups, hosts and host patterns
- Environment variables and group_vars/host_vars

Module 4 – Automate provisioning and configuration

- Deployment of services (Nginx, PostgreSQL, etc.)
- System configuration and user management
- SSH security and hardening playbooks

Module 5 – Execution and orchestration

- Tags, conditions and loops
- Multi-host scheduling and serial execution
- Error handling and idempotence

Module 6 – Integration with CI/CD

- Using Ansible in GitLab CI, Jenkins and GitHub Actions
- Automating deployments after commit or tag
- Pipeline gates and approval flows

Module 7 – Playbook security and maintenance

- Ansible Vault and secret management
- Playbook testing and Molecule
- Versioning, documentation and quality pipeline integration

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