MFE-IT

Reference: OF/EN/JM

JMeter Performance Testing Training Course

Simulate, Measure and Optimise Your Large-Scale Web Applications

Duration: 5 Days | Hours: 35 h

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

DESCRIPTION

Application performance is not a luxury — it is a fundamental criterion for quality and trust. Apache JMeter is one of the most powerful open-source tools for simulating user loads, running performance tests and detecting bottlenecks before they reach production.

This JMeter training course teaches you how to design, execute and interpret load tests using JMeter, with practical application in realistic scenarios: REST APIs, web applications, databases and message queues. You will also learn to integrate JMeter into modern CI/CD pipelines.

LEARNING OBJECTIVES

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

- Understand key performance testing concepts
- Master the JMeter interface and its components
- Simulate user load on an API or website
- Analyse response times, errors, network and back-end performance
- Design complex scenarios with variables, assertions and timers
- Generate clear and interpretable performance reports
- Integrate tests into a CI/CD chain (GitLab, Jenkins, GitHub Actions)

PREREQUISITES

- Basic knowledge of HTTP, APIs or web development
- Comfortable working with files, environment variables and command lines
- Previous experience with functional testing is a plus

> *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

QA engineers, developers and DevOps profiles working on performance-critical applications.

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 Performance Testing

- Types of tests: load, stress, endurance, spike
- Key indicators: TPS, latency, error rate, throughput
- Performance testing strategy and methodology

Module 2 – Getting Started with JMeter

- Graphical interface and test plan tree
- User groups, samplers and listeners
- Main configuration elements

Module 3 – Creating Simple Scenarios

- HTTP GET and POST samplers
- Data extraction with regular expressions and JSON path
- Virtual user configuration and result visualisation

Module 4 – Variables, Assertions and Timers

- Dynamic configuration with CSV Data Set Config
- Content and response time assertions
- Think Time and realistic user behaviour simulation

Module 5 – Advanced Tests and Components

- REST/JSON API tests and database (JDBC) tests
- FTP, JMS and gRPC sampling
- Chained tests and authentication scenarios

Module 6 – Result Analysis and Optimisation

- Interpretation of JMeter reports
- Aggregated metrics and percentile analysis
- Identifying bottlenecks and technical recommendations

Module 7 – Automation and CI/CD

- Command-line execution and headless mode
- Integration in Jenkins, GitLab CI and GitHub Actions
- Automatic HTML report generation and trend tracking

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