Load Testing With JMeter™

- Develop a foundational understanding of JMeter
- Determine strategies for recording a test
- Discover how to monitor bottlenecks
- Understand meaningful reporting strategies
- Learn how to Scale tests in the cloud cost effectively

Load and performance testing is complicated due to the holistic nature of finding performance bottlenecks. Rather than complicate matters by introducing the complexities of a proprietary load testing software licensing scheme, with some added engineering effort, you can use an open source framework to manage, record, and execute your tests.

This hands-on class will engage students in running tests against a sample application to help solve issues that include basic test recording, dealing with SSL, and parameterizing tests. It includes theoretical components that discuss how to find bottlenecks, what and how to monitor tests, the importance of results aggregation and reporting, and how to implement it. Lastly, we will discuss the creation of a cost-effective load and performance infrastructure in the cloud so you can scale tests and not break the bank.

Who Should Attend
This intermediate class contains technical content that teaches JMeter load testing techniques and is appropriate for Software Developer, Software Tester, Test Engineer, Performance Tester, Performance Engineer, Test Lead, DevOps Engineer, and Operational Support roles. Anyone interested in making an elastic load testing infrastructure that can fit into their CI/CD pipeline should also attend.

Prerequisites
Participants should have some programming knowledge, some knowledge of the http protocol, and a basic understanding of how web servers work.

Laptop Required
This class involves hands-on activities using sample software to better facilitate learning. Each student should bring a laptop with a remote desktop protocol (RDP) client preinstalled. Connection specifics and credentials will be supplied during class. Please verify permissions with your IT Admin before class. If you or your Admin have questions about the specific applications involved, contact our Client Support team [1].

Course Outline

Intro to JMeter
Discussion of the tool
Overview of the UI
Discussion of Basic Performance testing concepts

Recording a Test
Step by step instruction for recording a simple test against a sample application
Examples of how to locally execute that test

Picking Test Scenarios
Theory section that identifies some rules of thumb for selecting tests
What to do when you have to create test scenarios from scratch
How to decide what to test on a brand new system

Running Tests in Parallel
Introduction of thread groups

Reading the results to a simple test

Dealing with HTTPS
High level discussion of HTTPS concepts
How JMeter handles HTTPS
Hands on run through of recording a test against an HTTPS sample site

Building Tests from a Recorded Script
Discussion on generalizing tests
Walk through of Jmeter UI tools that help parameterize tests

Running Tests
Why you should use Jenkins to control test execution
SCM and managing your tests
Exercises with Jenkins

Overview of data dependancies
Discussion of when and how to seed data

What to Monitor
Where to look for bottlenecks
Common free tools to use
Discussion of the usual suspects

Results Aggregation and Reporting
How to collect data
How to normalize the data for a coherent report
The importance of time

Scaling in the Cloud
Demo of a simple, scaleable, cost effective performance testing architecture
Discussion of design decisions and limitations

Price: $1495