

Performance Testing - LoadRunner

Duration: 5-6Weekends (Weekend Batch)

Prerequisites

- Knowledge of Basic Software Testing.
- Basic of C Language

Topics

1. Introduction to Performance Testing

- What is Performance Testing?
- Benefits of Performance Testing
- Types of Performance Testing
- Performance TestingLife cycle
- Performance Testing concepts and Terminologies
- HTTP Request/Response Structure

2. Tool Introduction

- Introduction about the LoadRunner
- LoadRunner Architecture
- Different components of LoadRunner
- Basic of different Load runner Protocols
- Protocol Identification

3. Scripting

- Vugen Overview
- Script Recording Basics
- Enriching the Script via Correlation & Parameterization
- Validation check points& Error handling
- Script enhancement using Fiddler tool.
- Different LR functions
- Demo of Sample application
- Practice

4. Scenario Creation & Execution

- Run time setting
- Elements of Scenario
- Setting up load runner scenario
 - Ramp up & Ramp down strategy
 - Group strategy
 - Step up ScenarioException Handling
- Different Scheduler Options

- Load Test / Stress Test/Endurance Test setup
- Execution setup
- Online Monitoring
- User Defined Exception

5. Monitoring Profile Setup

- Infrastructure Monitoring Setup
- Setting Counters on Windows and Linux servers
 - Memory
 - CPU
 - Disk
 - Network

6. Analyzing the Results

- In-depth walkthrough of how to analyze the result
- Understanding of each graph types
- Client side Performance Metrics
- Server side Performance Metrics

7. Root Cause analysis with LoadRunner

- Bottleneck Identification
- 90th Percentile
- Server side analysis

8. Reporting

- Interim Test report
- Test closure report

9. Basic of Performance Engineering

- Basic PE concept
- Introduction to different Server monitoring tool
 - PerfmonAnalyzer
 - NMON Analyzer
 - CA Wily Intra-scope
 - Dynatrace

JMeter - Performance Testing Tool

Duration: 4Weekends (Weekend Batch)

Prerequisites

- Knowledge of Basic Software Testing

Topics

1. Introduction to Performance Testing

- What is Performance Testing?
- Benefits of Performance Testing
- Types of Performance Testing
- Performance Testing Life cycle
- Complete process involved in performance testing projects
- Key Business Processes & Use Cases
- Performance Testing concepts and terminologies
- HTTP Request/Response Structure

2. Tool Introduction

- Introduction about the JMeter
- Other Tools available in the market
- Installation & Running
- Introducing the JMeter GUI

3. JMeter

- JMeter Overview
- Features of JMeter- Advantages of JMeter
- JMeter Architecture
- JMeter Elements- Components of JMeter
- Installation

4. Building a Test Plan

- Elements of Test Plan
- Loading and Saving Elements
- Configuring Tree Elements
- Executing a Test Plan
- Reading Results of Test Plan

5. Scripting using JMeter

- Recording WebApplication
- Scripts enrichment- Make the script work for different users, different environments

- Parameterization – Create variables for user input
- Correlation- Handling dynamic values
- Validation checks- Check the server response
- Transactions- Script standards
- Think Time
- Pacing

6. Parameterize with test data

- Identifying the test data on AUT
- Open a csv file with JMeter
- Reading the data from CSV files
- Using the parameters in JMeterTests

7. Execution:

- Setup of Load Generators machines
- Scenario Set-up
- Execution in GUI Mode
- Execution in Non- GUI Mode

8. Result analysis-

- Understanding of different formats of results in JMeter
- Client-side Metrics
- Server-side Metrics

9. Reporting- Report presentation to client

- Configuring and Generating the Spline Visualizer
- Generating the Aggregate Graph for multi group test
- Generating the Aggregate Report for multi thread group test
- Generating the Summary Report

- ✓ **Hands on Experience on Live Project**
- ✓ **Focus on Performance testing core concepts.**
- ✓ **Practice exercises on different live applications**