

Agile Performance Testing LoadRunner, JMeter

Duration: 35 Hours

Prerequisites

- Knowledge of Basic Software Testing.
- Knowledge Of Java

Topics

1. Introduction

- What is Performance Testing?
- Need of Performance Testing?
- Methodology used in Performance Testing
- Life cycle of in Performance Testing

2. Tool Introduction

- Available Tools in market
 - Neoload
 - Load runner
 - Jmeter
 - Blazemeter
 - RationalRose

- Load Runner

3. Load Runner/Performance Center

- Architecture of Load Runner
- Installation
- Licensing

4. Scripting

- Vugen Overview
- Overview of HTTP/HTML protocol
- Demo of Sample application on HTTP/HTML & Web services
- Recording a script in HTTP/HTML & web services
- Enriching the Script via Correlation & parameterization
- Advanced Concepts of Data manipulation in Vugen
- Practice 1
- Practice 2
- Overview of RDP/Citix/ODBC/RTE protocols

5. Scenario Creation & Execution

- Setting up load runner scenario
 - Ramp up & Ramp down strategy
 - Group strategy
 - Step up ScenarioException Handling
- Load Test / Stress Test/Endurance Test setup
- Execution setup
- Online Monitoring
- User Defined Exception

6. Monitoring Profile Setup

- Infrastructure Monitoring Setup
- Setting Counters on Windows and Linux servers

- Memory
- CPU
- Disk
- Network

7. Analyzing the Results

- In-depth walkthrough of how to analyze the result
- Understanding of each graph types
- Bottleneck Identification

8. Performance Engineering Brief

- Use of Profilers
- Dynatrace & JProfiler Overview
- JDK Free Tools
- Knowledge Repository to refer

9. Function testing Key Concepts (.5 days)

- Need for testing
- Vmodel & testing levels.
- Test case creation
- Defect life cycle
- Defect management tools overview
- Black box testing Techniques
 - Equivalence partitioning
 - Boundary value analysis
 - Decision table testing
 - State transition testing
 - Use case testing
- White box testing techniques
 - Statement testing and coverage
 - Decision testing and coverage
 - Other structure based testing
- Exploratory testing
- Risk based testing techniques

10. Jmeter (free ware powerful Testing Tool)

- Jmeter overview
- Features of Jmeter
- Installation
- Recording webApplication
- Other protocols supported
- Scripts enrichment
- Prameterization
- Correlation
- Validation checks
- Execution
- Setup of Generators
- Result analysis

- Jmeter plugins
- Defect tracking
- 11. Performance Testing In Agile Way**
 - Agile Software Development
 - Agile Testing Methods
 - Roles & Skills of Tester in Agile Team
 - Tools in Agile Projects
 - Release & Iteration Planning
 - Managing an Agile Performance Testing
- 12. Security Testing Overview**
 - What is Security Testing?
 - HTTP & HTTPS basics
 - Encoding & Decoding
 - Testing Cookies
 - Testing web service security
 - Techniques
 - Injection
 - Broken Auth & Session Management
 - Cross Site Scripting
 - Insecure Direct Object reference
 - Security Misconfiguration
 - Sensitive data exposure
 - Missing Functional Level Access control
 - Cross site request forgery
 - Using Components with Known Vulnerabilities
 - Unvalidated Redirects and Forwards
 - Open source & free security testing tools