

Performance Testing - Loadrunner

Course Duration: 40 Hr.

Performance Testing Concepts

- What, Why and How Performance Testing
- Types of Performance Testing
- Important Terminologies of Performance Testing
- Performance Testing Life Cycle

LoadRunner Installation

- LoadRunner architecture
- Where to install LoadRunner Components
- Identify hardware and software needs for installation

Major Topics – VuGen

Introducing VuGen

- Define VuGen
- Identify the main components of the VuGen Interface
- Experience the new look and feel of VuGen UI

Recording for the Web

- Describe the main VuGen UI
- Use the Protocol Advisor
- Create VuGen Scripts by recording user Steps
- Identify the differences between the HTML and URL recording levels
- Save Scripts
- Create Business Process Reports

Replaying Scripts

- Identify and configure the appropriate web runtime settings for reply
- Replay the script in VuGen to verify script functionality
- Recognize the tools available in VuGen

Inserting Transactions

- Importance of Transaction function in a script
- Inserting Transaction during and after recording

Parameterizing a Script

- Importance of Parameterization and how they work
- Solve playback problems with parameterization

Verifying Script

- Recognize why and when to use verification
- Identify visual cues to check for during load testing
- Add Text Checkpoints during and after recording

Creating Actions

- Create Actions for a Web Script
- Configure Actions to achieve load testing goals

Using the Editor

- Work with the editor
- Send customized output messages to the Replay log
- Identify basic C code including statements, variables and functions
- Apply basic debugging techniques in VuGen

Advance Scripting Techniques

- Recognize general LoadRunner Functions
- Recognize protocol specific functions

Auto Correlations After Recording

- Work with Correlation Studio
- Correlation dynamic values found by using the Auto Correlation tool

Manual Correlation

- Manually inserting web_reg_save_param correlation function
- Manually insert web_reg_save_param_regexp correlation function
- Parameterize the dynamic value in a script
- Correlate a script manually by using Wdiff

Auto Correlation during Recording

- Create correlation rules to auto correlate during recording
- Import and export correlation rules

Controller and Analysis

Introduction

- Need for Load testing
- Describing various types of Performance test objectives
- Identify the steps of the LoadRunner methodology
- Defining the term “Scenario” in the context of LoadRunner
- Identify strategies for creating effective scenarios

Planning an Effective Load Test

- Define measurable goals for testing
- Gather information before testing

- Document and organize system information

Creating a Scenario

- Explain elements of LoadRunner Scenario
- Identify different types of scenario
- How to choose the scenario
- Present the basic steps for creating a scenario

Using Runtime Settings

- Difference between Script and Scenario Run-Time Settings
- Configure Runtime Settings in Controller

Scenario Execution

- Prepare a Scenario Run
- Identify techniques for running a Scenario efficiently

Scheduling Scenarios

- Difference between Scheduling by Scenario and by Group
- Configure Scenario start time
- Explain Real-world Schedule and Basic Schedule
- Manage Schedules through the actions grid
- Manage Schedule through the scenario interactive graph

Performance Monitors

- Importance of Performance monitors
- Select performance monitors to achieve load test goals
- Add measurements for performance-based goals

Server Monitoring and Identifying Bottlenecks

- Configuration of Servers and Monitoring
- IIS, Weblogic
- SQL Server
- Oracle
- OS Resources
 - UNIX and Windows
 - Identifying Application related Bottlenecks and Server side Bottlenecks

Analysis

- Work with the Graphs to Display Data
- Analyzing Client Side and Server Side Graphs
- Granularity, Merging , Correlating the Graphs

Reporting

- How to prepare HTML Reports
- How to prepare Performance test reports using word
- How to compare the graphs with baseline graphs
- How to write recommendation after performance test

ASKMETRAINING