

LoadRunner Professional

Course Summary

Description

This course introduces students to HP LoadRunner. You will learn about issues related to creating, running and maintaining scenarios in the LoadRunner Controller.

This course also covers issues related to recording web based applications in the LoadRunner VuGen program focusing on planning and recording of the test script, enhancing the test and adding custom code.

Lastly, the students will learn how to use the Analysis tool to analyze load test results. The numerous hands-on lab exercises are designed to provide you with the knowledge necessary to create scripts in VuGen, execute scenarios in the Controller, and view the results in the Analysis tool.

Topics

- LoadRunner Functionality and Terminology
- Planning a Script
- Recording and Running a Script
- Run-Time Settings
- Transactions
- Verifications
- Correlation After Recording
- Correlation during Recording
- Parameters
- Planning a Scenario
- Creating a Scenario
- Running a Scenario
- Scheduling
- Service Level Agreements
- Monitoring
- Basic Analysis
- Advanced Scripting
- Manual Correlations
- Intro to Advanced Scripting
- Custom Checkpoints
- String Manipulation
- Using the Ord=All Option
- Advanced Parameters
- Advanced Controller options
- Additional Attributes
- Advanced Analysis
- Performance Analysis and Tuning Approach
- Graph options
- Reporting – Analysis and HTML Reports
- Reporting - Templates and Reports

Audience

This course is designed for performance engineers, technical managers, and software engineers.

Prerequisites

Before taking this course, some basic programming knowledge would be useful, however it is not mandatory.

Duration

Five days

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Course Outline

- I. LoadRunner Functionality and Terminology**
 - A. Discover the capabilities of LoadRunner while learning LoadRunner specific terminology.
- II. Planning a Script**
 - A. Determining what steps to perform
 - B. Consider data and data usage
- III. Recording and Running a Script**
 - A. Recording Options
 - B. Recording the test case
 - C. Running a test and verify the results
- IV. Run-Time Settings**
 - A. Setting appropriate logging option
 - B. Controlling the number of iterations to playback
 - C. Think times and Pacing settings
- V. Transactions**
 - A. Add Transactions during recording
 - B. Add Transactions after recording
- VI. Verifications**
 - A. Add a verification during recording
 - B. Add a verification after recording using the keyword view screenshots
- VII. Correlation After Recording**
 - A. Use the Scan for Correlations tool
 - B. Create correlations
- VIII. Correlation during Recording**
 - A. Add a rule to the recording options
 - B. Parameterize and correlate the script
 - C. Use Checkpoint
- IX. Parameters**
 - A. Adding Parameters in the keyword view, and in the script view
 - B. Create a file type parameter
 - C. Examine other parameter types, e.g. Random type, date time type
 - D. Simulate Parameter Usage
- X. Planning a Scenario**
 - A. Determining which test cases to test
 - B. Determine rates of business process usage
- XI. Creating a Scenario**
 - A. Create a new Manual Scenario
 - B. Adding Scripts, Load Generators and Vusers
 - C. Setting and displaying the Vuser status
- XII. Running a Scenario**
 - A. Defining Run-time settings
 - B. Viewing the replay logs
- XIII. Scheduling**
 - A. Per Script vs. Per Group Scheduling
 - B. Scheduling actions, ramp up, ramp down, initialization
- XIV. Service Level Agreements**
 - A. Configure SLA rules
- XV. Monitoring**
 - A. Adding a monitor
 - B. Configuring the monitor
- XVI. Basic Analysis**
 - A. The Summary Report
 - B. Graphs
 - C. Standard Graphs
 - D. Monitor Related Graphs
 - E. Graph options - granularity, filters, merging graphs
 - F. generating reports
- XVII. Advanced Scripting**
- XVIII. Manual Correlations**
 - A. Determine appropriate left and right boundaries and ordinal values
 - B. Add the web_reg_save_param_ex function

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Course Outline (cont'd)

XIX. Intro to Advanced Scripting

- A. Condition statements and loops
- B. Common string manipulation functions
- C. Data conversion functions
- D. LoadRunner specific functions
(lr_eval_string, output messages,
lr_save_string)

XX. Custom Checkpoints

- A. Examining the web_reg_find
savecount option
- B. Capturing data using the
web_reg_save_param function

XXI. String Manipulation

- A. sprintf, strstr, strcpy, strcat

XXII. Using the Ord=All Option

- A. Capturing multiple related items
- B. Randomly selecting one of the items

XXIII. Advanced Parameters

- A. lr_save_string, lr_save_int,
lr_save_datetime

XXIV. Advanced Controller options

XXV. Additional Attributes

- A. Setting dynamic parameter values

XXVI. Advanced Analysis

XXVII. Performance Analysis and Tuning Approach

- A. Explain the objectives of Performance
Analysis

XXVIII. Graph options

- A. Advanced graphing and display
options

XXIX. Reporting – Analysis and HTML Reports

- A. Identify Understanding effective
reporting
- B. Identify available Report types

XXX. Reporting - Templates and Reports

- A. Learning how to use the Report
Template
- B. Creating a new Template