

Training: Micro Focus LRP120 - LoadRunner Professional Essentials



TRAINING GOALS:

This five-day course introduces students to the LoadRunner Professional 2020 application. The course covers topics about the Virtual User Generator (VuGen), Controller, and Analysis tools. This course is designed to give you a foundation in basic load testing tasks. You create and run load test scenarios using the Controller.

The Analysis tool is used to analyze load test results, and you learn to work with the graphs to display data after a test is executed. The hands-on labs 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. The course consists of focused, task-oriented lectures, text, and a series of detailed hands-on labs to teach the course material to the student.

Upon successful completion of this course, you should be able to:

- Identify the information that you need for load testing.
- Identify the components of the LoadRunner Professional (LRP) application
- Apply the recommended workflow to create a basic LRP scenario.
- Assign scripts, run-time settings, performance monitors, Load Generators (LGs), and Virtual User (Vusers) to a LRP scenario based on your load testing goals.
- Perform a load test on your application by running a scenario.

Audience/Job Roles

This course is intended for:

- Quality Assurance and Performance Engineers
- Users of LoadRunner who need to create scripts to load test their web applications
- Executives involved in any aspect of the load testing process

CONSPECT:

- Module 1: Course Overview Identify the contents and objectives of the course.
 - Define the class schedule and class logistics.
 - Identify the related courses.
 - Discuss the lab environment details

- Module 2: Introduction to LoadRunner 2020
 - Explain the need for load testing.
 - Describe various types of performance test objectives.
 - Identify the steps of the LoadRunner Professional (LRP) methodology
 - Define a scenario in the context of LR.
 - Identify strategies for creating effective scenarios
- Module 3: What's New in LRP 2020
 - Identify the key new features of LRP 2020.
 - Explain the general improvements with VuGen 2020
- Module 4: Planning an Effective Load Test
 - Define measurable goals for your load test.
 - Gather preliminary information before load testing your system
 - Organize system information effectively.
 - Use gathered information to plan load tests
- Module 5: Installing LRP Components
 - Describe the LRP architecture
 - Determine where to install the LRP components.
 - Identify the software and hardware required for installation.
 - Troubleshoot LG connectivity issues.
 - Configure the Network Virtualization (NV) settings
- Module 6: Introduction to Scenarios
 - Describe the elements of a LR scenario.
 - List the basic steps for creating a scenario.
 - Configure an LG in the scenario
- Module 7: Using Run-Time Settings
 - Define run-time settings for load testing.
 - Describe the difference between run-time settings for scripts and scenarios.
 - Configure run-time settings based on load testing goals
- Module 8: Scheduling Scenarios
 - Define and configure scenario scheduling.
 - Define scenario options.
 - Define real-world schedule and basic schedule run modes.
 - Manage schedules using the actions grid and the Interactive Schedule graph
 - Stop a scenario
- Module 9: Using Performance Monitors
 - Describe the value of performance monitors.

- Select performance monitors to achieve load test goals.
- Add measurements for performance-based goals
- Module 10: Running a Scenario
 - Prepare for a scenario run.
 - Define the scenario execution process.
 - Identify the best practices for running a scenario effectively.
 - Run a scenario
- Module 11: Using the Analysis Tool
 - Describe the Analysis tool and the categories of analysis graphs.
 - Describe the value of analyzing results.
 - Use graphs to display data.
 - Describe graph data and raw data.
 - Apply granularity to many graphs, merge graphs, and perform auto:correlation.
 - Use Service-level Agreement (SLA) reports
 - Run report generations utilities
- Module 11: Course Overview of Virtual User Generator
 - Record scripts in the web environment using the Virtual User Generator (VuGen)
 - Create a Vuser script template.
 - Replay and debug the script in VuGen.
 - Measure steps and business processes using transactions.
 - Parameterize scripts to vary user input data.
 - Add text checkpoints during and after recording of scripts.
 - Define an action for a web script.
 - Work with the VuGen Editor
 - Explain the general LR functions.
 - Apply basic debugging techniques in VuGen.
 - Correlate scripts to process server-generated data
 - Import and export correlation rules.
- Module 12: Introduction to Virtual User Generator (VuGen)
 - Define Virtual User (Vuser) and VuGen
 - Explore the new look and feel of the VuGen UI.
 - Explain how to use the step navigator and solution explorer.
 - Discuss the script workflow.
 - Create scripts using VuGen.
 - Record business processes with VuGen
- Module 13: What's New in VuGen

- Discuss the UI improvements in LoadRunner Professional.
- Describe the protocol enhancements
- Module 14: Recording Scripts for Web Applications
 - Create VuGen scripts by recording user steps.
 - Save scripts.
 - Create a Vuser script template.
 - Create business process reports
- Module 15: Replaying the Vuser Scripts
 - Recognize the debugging tools available in VuGen.
 - Identify and configure the appropriate web run-time settings for replaying scripts.
 - Replay and debug the script in VuGen
- Module 16: Inserting Transactions into the Script
 - Explain the use of transactions in a script.
 - Add a transaction into a script during recording.
 - Insert a transaction into a script after recording
- Module 17: Parameterizing a Script
 - Define parameterization.
 - Determine when to parameterize a script.
 - Create and modify parameter lists.
 - Create new parameters.
 - Work with parameter properties
 - Configure run-time settings for parameters
- Module 18: Verifying the Vuser Scripts
 - Identify the need to use verification in scripts.
 - Define verification for scripts.
 - Add text checkpoints during and after recording of scripts
- Module 19: Creating Actions for a Web Script
 - Define an action for a web script.
 - Record a script with multiple actions.
 - Create action blocks
- Module 20: Using the VuGen Editor
 - Work with the VuGen Editor
 - Send customized output messages to the Replay Log.
 - Identify basic C code, including statements, variables, and functions.
 - Apply basic debugging techniques in VuGen
- Module 21: Using the Advanced Scripting Techniques for Vuser Scripts

- Explain the general LR functions.
- Explain the protocol-specific functions
- Module 22: Auto Correlation After Recording
 - Describe correlation.
 - Work with the Correlation Studio
 - Correlate dynamic values after recording a script
- Module 23: Using Manual Correlation
 - Explain the manual correlation process.
 - Configure the parameters for correlation.
 - Correlate a script manually by:
 - Using the WinMerge utility
 - Adding the web_reg_save_param_ex correlation function.
 - Parameterizing the dynamic value in the script
- Module 24: Auto Correlation During Recording
 - Create correlation rules to auto correlate during recording.
 - Regenerate and record scripts
 - Import and export correlation rules

REQUIREMENTS:

To be successful in this course, you should have the following prerequisites or knowledge.

- Have working knowledge of Windows, Websites, and browsers
- Fundamental understanding of C programming is helpful, but not required.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Micro Focus (course completion).

TRAINER:

Authorized Micro Focus Trainer