

## Training: Micro Focus LRE120 - LoadRunner Enterprise Essentials



### TRAINING GOALS:

This five-day course introduces students to the LoadRunner 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:

- Describe the LoadRunner Enterprise architecture
- Manage user accounts
- Assign user privileges
- Manage multiple projects
- Oversee server resources
- Manage test executions
- Monitor and analyze error information using various reports
- Plan effectively for load tests
- Describe the user site's functionality
- 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

### 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: LoadRunner Enterprise Course Overview
  - Describe the LoadRunner Enterprise architecture
  - Manage user accounts
  - Assign user privileges
  - Manage multiple projects
  - Oversee server resources
  - Manage test executions
  - Monitor and analyze error information using various reports
  - Plan effectively for load tests
  - Describe the user site's functionality
  - Create, configure, and execute load tests
  - Use analysis graphs to determine whether the test achieved the set goals
- Module 2: Introduction to LoadRunner Enterprise
  - Describe the basic LRE architecture and functionality
  - Identify the steps of the load testing process
  - Provide an overview of LR Enterprise
  - Explain the roles and tasks of the Performance testing team members
- Module 3: New Features in LRE
  - Introduce the LoadRunner family
  - Describe the new features in LoadRunner Enterprise
- Module 4: Performing LRE Admin Tasks
  - Explain the purpose and advantages of LRE Administration
  - Explore different features present in LRE Administration
  - Describe the privilege levels and access rights for a project
- Module 5: Planning an Effective Load Test
  - Analyze the Application Under Test (AUT)
  - Gather preliminary information before load testing the system
  - Organize system information effectively
  - Use the gathered information to plan load tests

- Module 6: Working with Vuser Scripts and Creating Monitor Profiles
  - Upload a Virtual User Generator (VuGen) script to LoadRunner Enterprise
  - Book and manage monitor profiles
  - Create a monitor profile
- Module 7: Configuring the Performance Test and Assigning a Monitor Profile
  - Create a test set
  - Configure scheduling options for the test
  - Associate Monitors profile
- Module 8: Updating Runtime Setting and Defining Service Level Agreements (SLAs)
  - Configure load test settings
  - Define Service Level Agreements (SLAs)
- Module 9: Creating a Test Set, Reserving Timeslot, and Running a Load Test
  - Configure the project settings and LRE Controller options
  - Explain the performance test run flow
  - Monitor the flow of the performance test run
  - Monitor the performance test run
  - Analyze the performance test results
- Module 10: Accessing Test Runs and Managing Performance Trends
  - Collate and analyze the load test data
  - Generate reports and graphs for a test set
  - Download the load test results files
  - Upload the files and reports
  - View and manage tests using the system perspectives
- 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

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- 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