

# LoadRunner Professional (LRP) Essentials (LRP)

ID LRP Prix sur demande Durée 5 jours

## A qui s'adresse cette formation

Quality assurance and performance engineers, users of LoadRunner Professional who need to load test their web applications, and executives involved in any aspect of the load testing process

## Pré-requis

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

- Have a working knowledge of Windows, websites, and browsers
- A fundamental understanding of C programming is helpful but not mandatory

## Objectifs

On completion of this course, participants should be able to:

- Explain the components of the LoadRunner Professional (LRP) application
- Record scripts for the web environment using the Virtual User Generator (VuGen)
- Enhance the scripts by adding Transaction (measure the response time of the business process), Parameterize (test with multiple data), Checkpoint (validate the correct page navigation), and Correlate (handle the dynamic values coming from the server)
- Replay and debug the script in VuGen
- Define an action for a web script
- Work with the VuGen Editor
- Identify the information that you need for load testing
- Apply the recommended workflow to create a LRP scenario
- Assign scripts, run-time settings, performance monitors, Load Generators (LGs), and Virtual Users (Vusers) to an LRP scenario based on your load-testing goals
- Perform a load test on your application by running a scenario

## Contenu

## LoadRunner Professional (LRP) Essentials – Three Days

### 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 Professional (LRP)

- Explain performance testing
- Describe various types of performance tests and its objectives
- Describe the performance testing approach or process
- Explain the LoadRunner Family
- Describe the LRP overview, architecture, and components
- Explain the Controller overview and accessing license information
- Describe analysis overview

### Module 3: What's New in LRP 2023 R1

- Discuss the improvements in LoadRunner Professional

### 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 LR architecture
- Determine the installation location for LoadRunner components
- Identify the software and hardware requirements for installation
- Troubleshoot Load Generator (LG) connectivity issues
- Configure the Network Virtualization (NV) settings

### Module 6: Introduction to Scenarios

- Describe the elements of an LR scenario
- Identify the basic steps for defining a scenario in the LoadRunner Controller

## Module 7: Using Run-Time Settings

- Define run-time settings
- Describe the difference between run-time settings for scripts and scenarios
- Configure run-time settings based on performance testing goals

## Module 8: Scheduling Scenarios

- Define scenario scheduling
- Define scheduling manual scenario
- Define real-world schedules and basic schedule run modes
- Manage schedules using the actions grid
- Explain the Interactive Schedule graph

## Module 9: Using Performance Monitors

- Describe the value of performance monitors
- Explain performance monitors and graphs type
- Configure performance monitors
- Discuss performance monitoring best practices

## Module 10: Running a Scenario

- Prepare for a scenario run
- Define the scenario execution
- Run a scenario from the Controller and command line
- Discuss the best practices for running a scenario efficiently
- Discuss common run-time errors

## 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 generation utilities

## Virtual User Generator (VuGen) Essentials – Two Days

### 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 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 3: What's New in VuGen 2023 R1

- Discuss the improvements in VuGen
- Describe the protocol enhancements

### Module 4: Recording Scripts for Web Applications

- Create VuGen scripts by recording user steps
- Save scripts
- Create a Vuser script template
- Create business process reports

### Module 5: Replaying and Debugging the Vuser Scripts

- Identify and configure the appropriate web run-time settings for replaying scripts
- Replay and debug the script in VuGen
- Recognize the debugging tools available in VuGen

### Module 6: Auto Correlation After Recording

- Describe correlation
- Work with Design Studio
- Correlate dynamic values after recording a script

### Module 7: 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 8: Inserting Transactions into the Script

- Explain the use of transactions in a script
- Add a transaction into a script during the recording
- Insert a transaction into a script after recording

**Module 9: Parameterizing a Script**

- Define parameterization
- Determine when to parameterize a script
- Create and modify parameter lists
- Create new parameters
- Work with parameter properties

**Module 10: Verifying the Vuser Scripts**

- Identify the need to use verification in scripts
- Define verification for scripts
- Add text checkpoints during and after the recording of scripts
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**Module 11: Creating Actions for a Web Script**

- Define an action for a web script
- Record a script with multiple actions
- Create action blocks

**Module 12: 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

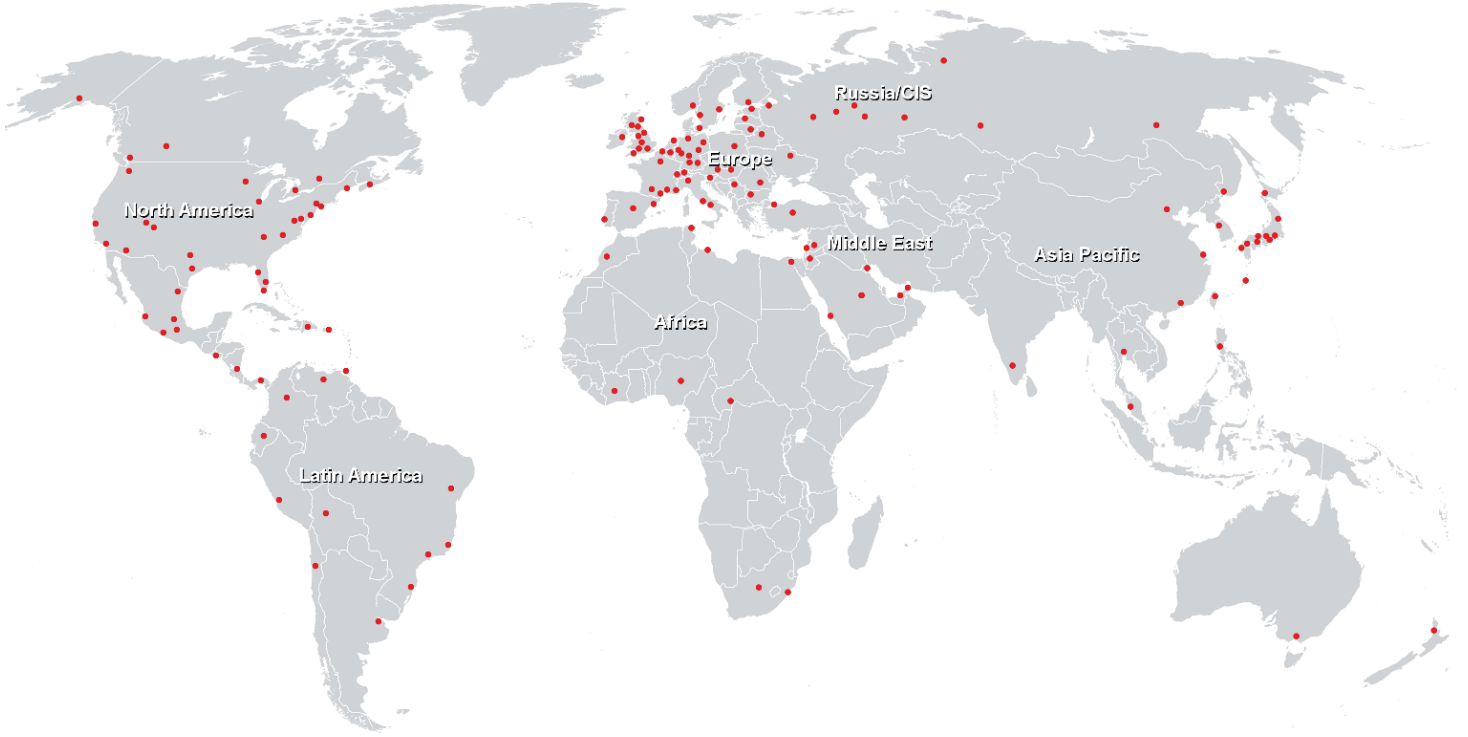
**Module 13: Using the Advanced Scripting Techniques for Vuser Scripts**

- Explain the general LR functions
- Explain the protocol-specific functions

**Module 14: Using Correlation Rules to Auto Correlate during Code Generation**

- Create correlation rules to auto correlate
- Regenerate and record scripts
- Import and export correlation rules

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