



LRP01SP-EX-2020 – LoadRunner Professional & VuGen 2020

Adoption Readiness Tool (ART)

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- Access printable job aids targeted towards specific application tasks
- View or practice a task in a simulated environment
- Experience full learning with key terms and concepts, product demonstrations, and self-assessments by viewing the entire course

Regardless of which route is selected, users will gain an understanding of the important key concepts, as well as gain competency in both the navigation and functionality of the application.

Course Description

This introduces a general overview of Performance Testing and how Micro Focus Load Runner Professional (LRP) is used for Performance Testing. You will learn about different components in LRP and an overview of Web Tours training application. You will also learn how to plan a load test. In the second module, you will learn about how to create scripts in VuGen and different customizations involved in scripting. In the third module, you will learn how to create a performance test scenario, how to configure different settings in scenario creation, and how to add monitors to a scenario for collecting various

performance-related server statistics during test execution. In the fourth module, you will learn about the scenario execution process. You will learn how to monitor Vusers and Server performance monitors during test execution. You will also learn how to add extra Vusers during execution, how to pause the execution, and how to access the Transaction response time details. In the fifth module, you will learn about Analysis Tool. Test execution results are analyzed with the Analysis tool. You will learn how to open the Test results, an overview of graphs present in the Analysis tool, and how to filter data for analysis. You will also learn how to define SLA in the Analysis tool and apply it with transactions to analyze the performance of functionalities.

In the VuGen course, you will learn how to develop a script to emulate the User steps. In the first module, you will learn the overview of the VuGen tool and its features. In the second module, you will learn various recording options and how to record a new script in VuGen. In the third module, you will learn about Run time settings and how to replay the recorded script using the run time settings. In the fourth module, you will learn about transactions in VuGen and how to insert a transaction before and after recording the script. In the fifth module, you will learn about parameters in the script required to emulate the different user data. In the sixth module, you will learn how to handle dynamic responses from the server by using correlation in the script. In the seventh module, you will learn how about text checks in the script. In the eighth module, you will learn about how to use different Actions in the script.

Audience/Job Roles

This course is intended for Performance Testers using Micro Focus LoadRunner Professional 2020.

Course Objectives

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 (LR) application
- Develop VuGen scripts emulating the user steps in the application.
- Apply the recommended workflow to create a basic LR scenario
- Assign scripts, run-time settings, performance monitors, Load Generators (LGs), and Virtual User (Vusers) to an LR scenario based on your load testing goals
- Perform a load test on your application by running a scenario
- Describe the basic elements of a VuGen script
- Create a VuGen script by recording user steps with VuGen in a web environment
- Identify and configure the appropriate web run-time settings for replaying scripts
- Explain the function of a transaction in a script

Prerequisites / Recommended Skills

To be successful in this course, you need to have a working knowledge of the Performance Testing process.

Course Topics

LoadRunner Professional	
Modules	Objectives
Module 1: Introduction	<ul style="list-style-type: none"> • Introduction • Objectives • Performance Testing • LoadRunner Expert Workflow • Identify the LoadRunner Solution • Open the LoadRunner Launch Screen* • Identify Supported Protocols • Isolate Performance Problems • Putting It All Together • Use the Training Application for Web Protocol* • Summary • Assessment
Module 2: Plan an Effective Load Test	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Planning Load Test • Planning a Load Test • Establish Load Test Goals • Gather System Usage Information • Define a Business Process • Step 1 - Identify a Business Process to Record • Step 2a - Record Business Process: Mission-Critical Transactions • Step 2b - Record Business Process: Heavy Throughput • Step 2c - Record Business Process: Dynamic Content • Step 3 - Identify Business Process to Record - Example • Step 4 - Measure Steps by Defining Transactions • Step 5 - Define Preferred Response Times • Step 6 - Document User Steps and Input Data • Step 7 - Determine Valid Test Data to Use • Step 8 - Define Valid Test Data Sources • Step 9a - Define Think Time • Step 9b - Define Navigation Times • Define Concurrency - 3 Levels • Level 1 - Define Application Concurrency • Level 2 - Define Business Process Concurrency • Level 3 - Define Transaction Concurrency • Obtain Customer Locations • Quantify Load Test Goals • Analyze the System Under Test • Task 1 - Understand the System Components • Task 2 - Map Business Processes to Infrastructure Components • Task 3 - Monitor Application Components • Task 4 - Plan System Monitoring • Task 5 - Use a Test Environment

	<ul style="list-style-type: none"> • Task 6 - Execute a Benchmark Run • Summary • Assessment
Module 3: Introduction to Scenarios	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Scenario Creation • Define a Scenario • The Controller's Role in Scenarios • The Scenario Tasks • Create Scenarios for Quantitative Goals • Create a New Scenario* • Add a New User Group* • Add a Load Generator* • Assign User Profiles • Assign Number of Vusers • Summary • Assessment
Module 4: Use Run-Time Settings	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Scenario Creation • About Run-Time Settings • Modify Vuser Run-Time Settings* • Summary • Assessment
Module 5: Scenario Execution	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Scenario Execution • Run a Scenario* • Execute Scenarios as a Team • The Test Execution Process • Understanding the Vuser Status Window • Monitor Vusers* • View the Scenario Status* • Find the Top Time Transactions* • Summary • Assessment
Module 6: Schedule Scenarios	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Scenario Creation • Schedule a Scenario • Use the Scheduler* • Configure a Scenario* • Manage Schedules* • Summary • Assessment
Module 7: Performance Monitors	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Scenario Creation • Performance Monitors • Set Monitor Options* • Choose Monitor Measurements* • Summary

	<ul style="list-style-type: none"> • Assessment
Module 8: Analysis	<ul style="list-style-type: none"> • Introduction • Objectives • LoadRunner Expert Workflow - Results Analysis • Identifying Performance Issues • Identifying Root Cause Analysis • Meeting Your Goals • Open a Results File and Isolate Issues* • Working with Data • Filter Data* • Defining Service Level Agreements* • View Cross Result Graphs* • Generate Analysis Reports* • Summary • Assessment

❖ Indicates a simulation

Virtual User Generators (VuGen)

Modules

Objectives

Module 1: Introduction	<ul style="list-style-type: none"> • Introduction • Objectives • VuGen Roadmap • Creating Scripts in VuGen • Invoking VuGen • Invoke VuGen* • Navigate the New VuGen Interface* • Review Layouts* • Using the Step Navigator • Using the Solution Explorer • Capture Business Processes* • Navigate the Output Window* • Navigate from the Tree View* • Access the Training Application* • Summary • Assessment
Module 2: Recording the Web	<ul style="list-style-type: none"> • Introduction • Objectives • Script Workflow • Accessing Protocol Advisor • Create a New Script for a Single Protocol* • Set Recording Options* • Think Time Settings • View Differences in HTML and URL • Record User Steps* • Editing Thumbnails • View the Recorded Script* • View the Recorded Snapshot* • Saving Scripts Locally • Create a Business Process Report* • Summary

	<ul style="list-style-type: none"> • Assessment
Module 3: Replay	<ul style="list-style-type: none"> • Introduction • Objectives • Script Workflow • Apply Run-Time Settings* • Set the General Options* • Run the Script* • Locating the Test Result Directory • Summary • Assessment
Module 4: Transactions	<ul style="list-style-type: none"> • Introduction • Objectives • Script Workflow • Defining Transactions • Measuring Transactions • Add Transactions During Recording* • Add Transactions After Recording* • Check the Replay Log* • Apply Automatic Transactions* • Summary • Assessment
Module 5: Parameters	<ul style="list-style-type: none"> • Introduction • Objectives • Script Workflow • Defining Parameterization • Creating Real-World Scenarios Using Parameters • Determining When to Parameterize • Unique Constraints • Date Constraints • Data Dependency • Data Caching • Parameter Types • Parameterize Data Values* • Creating Data Files in Notepad • Creating a Date/Time Parameter • Assign Data Access Parameters* • Select the Extended Log Option* • View the Run-time Data* • Summary • Assessment
Module 6: Auto Correlation After Recording	<ul style="list-style-type: none"> • Introduction • Objectives • Script Workflow • Correlating Scripts • Recording Hard-Coded Dynamic Data • Replaying Dynamic Values • Correlating Automatically After Recording • Setting Correlation Options • Correlate Values and Verify Execution* • Summary • Assessment
Module 7: Verification	<ul style="list-style-type: none"> • Introduction

	<ul style="list-style-type: none"> • Objectives • Script Workflow • Verifying Functional Integrity for Concurrent Users • View a Test Specification Example • Determining Success with a Verification Step • Confirm the Success of a Business Process* • Adding Text Checks • Add a Text Check During Recording* • Add a Text Check After Recording* • Verifying the Text Check in the Replay Log • Checking for an Error Page • Summary • Assessment
Module 8: Actions	<ul style="list-style-type: none"> • Introduction • Objectives • Planning to Record Actions • Record a Script in a Single Action* • Record a Script in Multiple Actions* • Create an Action Block* • Set Sequential Run Logic* • Set Random Run Logic* • Summary • Assessment

❖ Indicates a simulation