

Quality Assurance & Testing

COURSE CONTENTS

1. WINRUNNER

Test Planning:

- The value of planning
- Common Web testing objectives
- Win Runner Expert Workflow

Creation & Playback of Win Runner:

- Generating the basic test
- The Win Runner development environment
- Use and management of the GUI Map
- Validating the script for successful playback

Enhancing Win Runner Tests:

- Verification
- Verification concepts
- Modifying the basic test to meet test requirements
- Verifying static objects and frames with point and click commands
- Verifying dynamic objects using TSL
- Using built-in functions for the Web

Data-driven testing:

- The benefits of data driven tests
- Using the Data Driver wizard to data drive the basic test
- Working with the data table
- Importing data from a database

Cross-browser testing:

- Testing with Netscape
- Testing with Internet Explorer

Test Result analysis long tracking:

- Analyzing test results
- Using data comparison viewers
- Updating expected results

Test Script Language (TSL):

- Variables, arrays
- Flow control
- Operators
- Input/output
- Built-in testing functions
- The Function Generator
- Debugging tools

Functions and Reusable Libraries:

- Creating user-defined functions
- Error handling
- Library scripts and init scripts
- Adding functions to the Function Generator
- Accessing external and API functions

Data-Driven Testing:

- Creating data-driven tests
- The DataDriver Wizard
- Writing Values to the Data Table
- Updating the Data Table from database
- Positive/ Negative test cases

Database Checkpoints:

- Creating database checkpoints
- How database verification works

Database Record Verification:

- Creating database record verification
- Enhancing database record verification
- How database record verification works?

Custom Controls:

- Identifying custom controls
- Mapping custom controls to standard controls
- Testing custom controls

2. LOADRUNNER

Planning an Effective Load Test:

- The importance of planning
- How to get, organize, and analyze system usage information

Record with the Virtual User Generator:

- Invoke the client application from VuGen
- Record user actions while completing real business processes
- Add Load Runner transaction measuring statements
- Add checkpoints to verify correct business process completion
- Check playback results

Parameters:

- When to parameterize script values
- Implement parameters in a Vuser script
- Replace user input with placeholder
- Decide on a replacement method
- Verify correct execution

Correlated Queries:

- Relational Database concepts
- SQL queries and Load Runner functions
- Identify correlated queries
- Fix correlated queries

Load Runner Scenarios:

- Define and connect to load generators (host computers)
- Define Vusers and scripts
- Add and configure performance monitors
- Modify options and run-time settings for specific purposes

Analyzing Scenario Execution:

- Find system bottlenecks
- Merge graphs and create cross result graphs
- Drill down in graphs to get more detailed data

3. TEST DIRECTOR

Project Set Up:

- Test Director Architecture and components
- Creating a Test Director project

Requirements:

- How software requirements relate to test cases
- How to create a test requirement
- How to add requirements to the Test Director project

Create Tests:

- Creating manual tests
- Adding automated tests to your project
- Linking tests to requirements

Analyze Project Progress:

- The different kinds of Test Director graphs and reports
- Using the Document Generator to create reports in Microsoft Word.

Other Test Director Utilities:

- Overview of Test Director features used by Test Director Administrators
- Using filters for your graphs and reports
- Different report formats.

Run Tests and Analyze Results:

- Creating and running test sets
- Analyzing test results
- Scheduling test runs
- Defining test dependencies and running tests conditionally.

Report and Track Defects:

- Understanding the defect life cycle
- Reporting and tracking defects
- Analyzing the Defect Table

4. Quick Test Professional (Functional Testing Tool)

- Introduction to QTP.
- Recording, running and analyzing scripts.
- Designing the scripts.
- Debugging the scripts.
- Creating checkpoints.
- Standard checkpoints.
- Text checkpoints.
- Text area checkpoints.
- Bitmap checkpoints.
- Object Spy.
- Object repository.
- Parameterize test scripts.
- Split Actions,
- Reusable actions.