

Automated Software Quality Assurance
in
**Client Server &
Web Based Applications
(Training Program)**

TestDirector,
Quick Test Pro (Windows, Web, SAP),
LoadRunner (ODBC & HTTP API)
WinRunner, Astra Quick Test
Silk Performer

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QA TRAINING SYLLABUS

DAY ONE

Morning

Session 1

Logistics	0.25 hrs
Training knowledge base	0.25 hrs
Introductions	0.25 hrs
Course Outline	0.25 hrs
QA Market Place	0.50 hrs
QA Methodology	2.00 hrs
HP-Mercury's Profile	0.25 hrs
HP-Mercury's Products	0.25 hrs

Afternoon

Session 2

Test Planning	0.75 hrs
Test Director - Concepts / Demo / Exercise	1.50 hrs
QTP / LoadRunner / WinRunner / Demo	1.50 hrs

Home Work

TestDirector Tutorial (During the week)	4.00 hrs
Test Planning & methodology presentation	2.00 hrs
Research Testing tools Matrix on the web	2.00 hrs
Revise subject covered in the class	2.00 hrs

DAY TWO

Morning

Quick Recap - Session One	0.25 hrs
Self Assessment Test (SAT - 1)	0.50 hrs

QTP - Basics

Session 3

What is QTP
Testing Methodology
Object Model
Object Repositories
Exercise

Afternoon

Session 4

Get hands Dirty with QTP
Recording and playback
Checkpoints

Standard Checkpoints

Image Checkpoints
Bitmap Checkpoints
Table Checkpoints
Accessibility Checkpoints
Text Checkpoints
Pages Checkpoints
Database Checkpoints
XML Checkpoints
Parameterization
Exercise

Home Work

Visual Basic Script (During the week)	4.00 hrs
Complete QTP Basic understanding	3.00 hrs
Revise subject covered in the class	2.00 hrs

DAY THREE

Morning

Quick Recap - Session One	0.25 hrs
Self Assessment Test (SAT - 2)	0.50 hrs

QTP - Advanced - 1

Session 5

Enhancing scripts in QTP
Introduction to Expert view
Keyword view Vs. Expert view
Adding steps in expert view using object methods and properties
Exercise

Afternoon

Session 6

Programming concepts
Descriptive programming
Modularization
Creating re-usable actions
Linking multiple actions

Creating and managing libraries
Exercise
Case study on QTP

Home Work

Visual Basic Script (During the week)	4.00 hrs
Complete QTP Basic understanding	3.00 hrs
Revise subject covered in the class	2.00 hrs

DAY FOUR

Morning

Quick Recap - Session One	0.25 hrs
Self Assessment Test (SAT - 3)	0.50 hrs

QTP - Advanced - 2

Session 7

Dynamic objects
Extract data at runtime from AUT
Enhancing scripts using:
 Loop and If..else statements
 Mathematical operators
 Recovery scenarios
 Reading and storing data from external file

Afternoon

Session 8

Case study

WinRunner

WinRunner Demo

Week 4 - Home Work

Complete QTP	6.00 hrs
LoadRunner Web, Networking, RDBMS, SQL	8.00 hrs
Revise subject covered in the class	2.00 hrs

Morning

Quick Recap - Session 4	0.25 hrs
SAT - 4 (Test and Evaluate Yourself)	0.50 hrs

LoadRunner - Client Server

Load Runner - Concepts/Demo/Exercise
Planning Load Testing
LR Scenarios
Analyzing Scenario Execution

Afternoon

Quadbase Database(SQL Programming)
LoadRunner(Client Server) Demo & Exercise

Home Work

Revise subject covered in the class	2.00 hrs
RDBMS Concepts, Web Technologies Tutorial	8.00 hrs

DAY SIX

Morning

Quick Recap - Session	0.25 hrs
SAT - 5 (Test and Evaluate Yourself)	0.50 hrs

LoadRunner - Web

Planning an effective load test
Creating Web Virtual User
Enhancing LR-Virtual user scripts
Transactions

Afternoon

Enhancing LR-Virtual user scripts...contd
Parameterization
Correlation
Checkpoints
Advanced Functionality

Home Work

Revise subject covered in the class	6.00 hrs
Server Testing concepts	4.00 hrs
Performance counters	4.00 hrs

enforce Programming concepts 8.00 hrs

DAY SEVEN

Morning

Quick Recap – Session 0.25 hrs

SAT – 6 (Test and Evaluate Yourself) 0.50 hrs

LoadRunner – Web

Case Study
 Create Web Virtual user scripts
 Enhance scripts
 Build scenarios to test
 Run load test

Afternoon

Analyzing Scenario Execution
 Presentation of load test results

Home Work

Revise subject covered in the class 2.00 hrs
 What To Test On Web
 Concepts On Web & Client 8.00 hrs
 Server Testing

DAY EIGHT

Morning

Quick Recap – Session 0.25 hrs
 SAT – 7 (Test and Evaluate Yourself) 0.50 hrs

Integrating Testing tools

QTP and TD integration
 LR and TD integration

QTP and SAP

QTP Case Study with SAP

Afternoon

Change Management
 Open Session

Automated Software Quality Assurance

Training Highlights

1. Covers Automated Testing tools by leading QA tool vendors

- a) TestDirector
- b) Quick Test Pro (Client Server , Web and SAP add in)
- c) WinRunner with web add-in
- d) LoadRunner including HTTP API
- e) Astra Quick Test (web testing)
- f) Silk Performer (overview)

2. Exposure to Application Testing in multiple environments

- a) Web architecture based applications
- b) Client-server architecture based applications

3. Two case studies (as in Fortune 500 companies)

Case Study No. 1

(Functional and Regression testing)

QTP centric, using advanced techniques like: data driven testing, user defined functions, project initialization files, GUI Maps, modular test scripts etc.

Case Study No.2

(Stress, Load and Performance testing)

LoadRunner centric, a full life-cycle-testing study providing exposure to requirements analysis, defining clients' operational profile, transactional volumes and present testing results for management review.

Advanced techniques like parameterization, correlation and performance monitoring are covered.

Our Strengths

1. Certified Product Specialists (CPS).

We boast of our 15-CPS consultants in mercury interactive tools.

2. 300,000 man-hours experience at Fortune 1000 companies to assist the training program.

3. Fully equipped, state-of-the-art Lab.

- Pentium Desktops, dedicated NT server, Internet Access, TCP/IP network.

Training Media

All training manuals, case study material are in electronic format.

Trainers

Mercury Interactive certified professionals with more **300,000** hrs of experience would assist you in completing the training program. Some of them are currently associated with Fortune 100 companies.

Training Advantage

All candidates graduating from prior batches are currently working in QA testing projects at different locations in the US. This phenomenal statistics reflect our training abilities.

Additional Learning

1. Learning Assistance

Participants in the training program get to attend the **technology sessions** that help them upgrade their knowledge base with the latest in the IT industry.

Technology sessions

- The subject matter (WinRunner / LoadRunner / TestDirector / Astra Quick Test)
- Client server technology
- TCP/IP and Networking
- RDBMS concepts
- Programming Languages like C , SQL etc.
- Operating Systems like NT , Unix and lot more

Extended Support

1. Post training Assistance

Graduates conditionally qualify for post-training support on:

- a. Problems that you might face in regular course of work

2. Placement Assistance

Successful candidates can avail the following services:

- a. Access to our in-house knowledge base
- b. Access to our comprehensive FAQ database
- c. Access to our client base
- d. Assistance in placement for the right candidates.