

## **Module- 4(Automation Core Testing)**

### **1. Which components have you used in Load Runner?**

- Components of load runner are :
  - Vuser Generator
  - Controller
  - Analyzer
  - Load Generator

### **2. How can you set the number of vusers in Load Runner?**

- You can set the number of Vusers in the controller section while creating your scenarios. Many other advanced options like ramp-up, ramp-down of Vusers are also available in the Controller section.

### **3. What is Correlation?**

- Correlation is used to obtain data which is unique for each run of your test script (ex: session ids). While recording, these dynamic values are hard-coded in your script causing the script to fail during playback. Correlation is a technique where dynamic values are not hard-coded in your script but are extracted at run-time to avoid failure.

### **4. What is the process for developing a vuser script?**

- There are four steps for developing a vuser script.
  - Record the Vuser Script.
  - Playback / Enhance the recorded vuser script.
  - Define the various run-time settings & check
  - Incorporate the script in a LoadRunner scenario

### **5. How load runner interacts with the application?**

- Protocol is used in Load Runner to interact with the application.

### **6. How many Vusers are required for load testing?**

- The number of VUsers required depends on your system under test, network configurations, hardware settings, memory, operating system, software applications objective of a performance test. There can not be any generic value for Vuser.

### **7. What is the relationship between response time and throughput?**

- The Throughput shows the amount of data in bytes that the Vusers received from the server in a second. When It is compared with transaction response time, throughput and response time get decreased.
- The peak throughput and highest response time would occur approximately at the same time.

### **8. What is the difference between hits/second and requests/second?**

- Hits per second mean the number of hits the server receives in one second from the vuser.
- Request per second is the number of request the vuser will request from the server.

### **9. What is automation testing?**

- Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite. On the contrary, Manual Testing is performed by a human sitting in front of a computer carefully executing the test steps.

### **10. Which are the browsers supported by selenium IDE?**

- Browsers supported by selenium IDE are
  - Google Chrome
  - Internet Explorer
  - Safari
  - Opera
  - Firefox

### **11. What are the benefits of automation testing?**

- Benefits of automation testing are
  - 70% faster than the manual testing
  - Wider test coverage of application features
  - Reliable in results
  - Ensure Consistency
  - Saves Time and Cost
  - Improves accuracy
  - Human Intervention is not required while execution
  - Increases Efficiency
  - Better speed in executing tests
  - Re-usable test scripts
  - Test Frequently and thoroughly
  - More cycle of execution can be achieved through automation
  - Early time to market

## **12. What are the advantages of selenium?**

- Selenium is pure open source, freeware and portable tool.
- Selenium supports variety of languages that include Java, Perl, Python, C#, Ruby, Groovy, Java Script, and VB Script. etc.
- Selenium supports many operating systems like Windows, Macintosh, Linux, Unix etc.
- Selenium supports many browsers like Internet explorer, Chrome, Firefox, Opera, Safari etc.
- Selenium can be integrated with ANT or Maven kind of framework for source code compilation.
- Selenium can be integrated with TestNG testing framework for testing our applications and generating reports.
- Selenium can be integrated with other open source tools for supporting other features.
- Selenium can be used for Android, iPhone, Blackberry etc. based application testing.
- Selenium supports very less CPU and RAM consumption for script execution.

## **13. Why testers should opt for selenium and not QTP?**

- Selenium is an open source whereas QTP is a commercial tool
- Selenium is used specially for testing web based applications while QTP can be used for testing client server application also

- Selenium supports Firefox, IE, Opera, Safari on operating systems like Windows, Mac, Linux etc. however QTP is limited to Internet Explorer on Windows.
- Selenium supports many programming languages like Ruby, Perl, Python whereas QTP supports only VB script.