



1) Which components have you used in Load Runner?

Ans. The components of LoadRunner are The Virtual User Generator, Controller, and the Agent process, LoadRunner Analysis and Monitoring, LoadRunner Books Online.

2) How can you set the number of Vusers in Load Runner?

Ans. While VuGen is primarily used for creating and editing scripts, you can also specify the number of Vusers when you run the scripts in a standalone manner:

1. Open VuGen: Launch the Virtual User Generator.
2. Create or Open a Script: Either create a new script or open an existing one.
3. Run the Script: You can run the script by clicking on the "Run" button.
4. Specify Vuser Count: In the "Run" dialog, you can set the number of Vusers to simulate. However, note that this is typically done in the Controller for more extensive load testing.

3) What is Correlation?

Ans. Correlation in performance testing, particularly in tools like LoadRunner, refers to the process of capturing dynamic values that are generated by the server during a user session and then using these values in subsequent requests.

4) What is the process for developing a Vuser Script?

Ans. Steps to Develop a Vuser Script

1. Planning: Identify user scenarios and understand application behavior.
2. Set Up VuGen: Open VuGen and create a new script based on the appropriate protocol.
3. Recording:
  - Start recording your actions in the application.
  - Stop recording after completing the user journey.
4. Enhancing the Script:
  - Parameterization: Replace hard-coded values with parameters.
  - Correlation: Capture dynamic values using web\_reg\_save\_param.
  - Think Time: Add delays to simulate real user behavior.
5. Debugging: Run the script in debug mode to identify and fix any errors.
6. Testing: Execute the script to ensure it works as expected.



7. Load Testing: Import the script into LoadRunner Controller, set Vuser parameters, and run load tests.
8. Analyze Results: Review performance metrics to identify any bottlenecks.

5) How Load Runner interacts with the application?

Ans. LoadRunner interacts with applications through the following key steps:

1. Protocol Layer: It uses various protocols (e.g., HTTP/HTTPS) to communicate with the application.
2. VuGen Recording: The Virtual User Generator (VuGen) records user actions, capturing requests and responses between the client and server.
3. Script Generation: VuGen generates scripts that can be modified for parameterization (using variables) and correlation (capturing dynamic data).
4. Execution: Load Generators simulate multiple virtual users (Vusers) that execute the scripts, sending requests to the server.
5. Monitoring: LoadRunner monitors application performance during tests, capturing metrics like response times and resource usage.
6. Analysis: After testing, LoadRunner provides reports to analyze performance and identify bottlenecks.

6) How many VUsers are required for load testing?

Ans. Generally, start with 50-100 VUsers for baseline testing and gradually increase to simulate peak load, with many applications testing between 100-500 VUsers or more for larger systems.

7) What is the relationship between Response Time and Throughput?

Ans. Response Time is the time taken to respond to a request, while Throughput is the number of requests processed in a given time.