**Test Objective :**

* **Evaluate the behaviour of application when 1000 users logged in at the same time and validate if response times are within NFRs.**
* **Evaluate the behaviour of application when 10000 users making payments at the same time and validate if response times are within NFRs.**

**Test Approach:**

**Spike testing** will be used to simulate sudden burst of load on application concurrently and evaluate the behaviour of the application.

Rendezvous function can be used to simulate concurrency load on the application and perform login\place order transactions at the same time. Rendezvous function needs to be used before the targeted transactions and settings needs to be updated at the scenario level.

Load-runner -Performance testing tool has been used to simulate this scenario using web(http) protocol.

**Scenario settings :**

Total number of users required : 10,000

Basic schedule, number mode

Ramp up period : 100 users gradually every 10 seconds.

Duration : 1 hours.

**Rendezvous settings :**

***Login - Transaction # 2:***  Release when 1000 Vusers arrive at the rendezvous select Timeout between Vusers: 120 seconds  
***Submit order Transaction #4 :*** Release when 10000 Vusers arrive at the rendezvous select Timeout between Vusers: 1500 seconds

By using above settings we should be able to simulate both the use cases and evaluate the behaviour of the application.

Note : Session timeout is assumed as 60 minutes.

**Script Details :**

Sample script has been created with basic transactions Welcome, login, search and submit order transactions with all the required settings.

As mentioned this is a sample script cannot be used for executions as this was created manually for assessment purpose.

**Parameter data settings:**

**Host Url, User credentials and card details needs to be been parameterised in the script.**

**P\_ Host URL – Sequential\Once**

**P\_Username : Unique\Once**

**P\_Password :Sequential\Once**

**We need 10,000 unique user details to conduct test execution and valid card details to submit orders.**

**Pre-requistes :**

* Application needs to be stable without any P1& P2 defects.
* APM tools (AppDynamics,CA Wily Introscope,sitescope ) are required to monitor server side metrics .
* Test data needs to be available for performing test executions.
* Test environment should be replica of production in terms of number of servers and capacity.