What Is Selenium Grid 2? When To Use Grid?

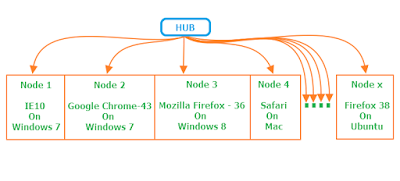
Earlier we learnt selenium WebDriver/Selenium 2 tutorials with practical examples and you can find all webdriver tutorials links on [**THIS PAGE**](http://software-testing-tutorials-automation.blogspot.in/p/selenium-webdriver.html). **Selenium Grid 2** may be new for most of you but you must needs to learn It because If you wants to **run your selenium software tests** In **multiple browser versions** and **OS parallel** then you need **Selenium Grid 2**. Let's try to understand what Is selenium Grid and when to use It.

**What Is Selenium Grid 2?**

Selenium Grid Is another project of selenium. Selenium grid provide us facility for distributed software test execution. Using selenium Grid, We can execute our selenium WebDriver software tests In different browsers, different browsers versions and different browser versions running on different operating systems In parallel at the same time.

Basically selenium grid has one hub and multiple nodes. Each node with same or different environments (As per your requirement) to executed tests In parallel.

Bellow given Images shows example structure of  selenium Grid. You can see there Is single Hub machine connected to multiple nodes(with different configuration) machine. You need node machine as per your requirement.

[](http://1.bp.blogspot.com/-Lycs9My8k44/VY_R6VIpazI/AAAAAAAABvQ/VKwUVPNujr0/s1600/Selenium+Gride+configuration.png)

**When To Use Grid 2?**

Main questions Is what are the benefits of selenium grid and why we needs to use It. Mainly there are two reasons behind usage of selenium grid In software testing Industry.

1. **To perform compatibility testing** - You can run same test In multiple environments so that It will be very easy for you to perform compatibility testing using selenium grid.
2. **To reduce test execution time** - As you know, we can run same test In multiple machines at same time so It will reduce your test execution time.

Using selenium grid, you can speedup software test execution process. Supposing your 50 software automation test cases takes 5 hours to complete execution In 1 machine then selenium grid with 5 nodes configuration will take only 1 hour to execute 50 test cases. This Is the main benefit of using selenium Grid.

- See more at: <http://software-testing-tutorials-automation.blogspot.in/2016/02/what-is-selenium-grid-2-when-to-use-grid.html?sthash.8TjsgcCc.mjjo#sthash.8TjsgcCc.a89tdVb7.dpuf>

java -jar selenium-server-standalone-2.44.0.jar -role hub

java -jar selenium-server-standalone-2.44.0.jar -role node -hub http://localhost:4444/grid/register