1. Download selenium-server-standalone-<version>.jar

http://selenium-release.storage.googleapis.com/index.html

Place it in a directory

1. Open Command prompt-> navigate to directory using cd command
2. Type "java -jar selenium-server-standalone-2.53.0.jar -role hub"

by default it executes with a port 4444

If you find an error porn already in use then give below command

java -jar selenium-server-standalone-2.53.0.jar -role hub -port 4445

1. Make sure you command prompt is showing a message "selenium grid hub is up and running"
2. Again open a new command prompt window
3. Goto all nodes and execute below command (For showing example iam taking current machine as node)

java -jar selenium-server-standalone-2.53.0.jar -role node -hub http://localhost:4444/grid/register -Dwebdriver.ie.driver=E:\Selenium Software\BrowserDrivers\iedriverserver.exe -Dwebdriver.chrome.driver=E:\Selenium Software\BrowserDrivers\Chromedriver.exe

1. You will find 5 Chrome, 5 Firefox and 1 IE browser in below url.

http://localhost:4444/grid/console

By default you can use 5 Chrome, 5 Firefox and 1 IE browser

1. To use only ie use below command

java -jar selenium-server-standalone-2.41.0.jar -role webdriver -hub http://localhost:4444/grid/register -port 5555 -browser browserName=iexplore

1. To use firefox

Give -browser browserName=firefox to set firefox

1. To use all browsers

-browser browserName=iexplore -browser browserName=firefox -browser browserName=chrome

1. **MaxInstance**: how many instances of same version of browser can run over the Remote System

For example, i have a FF12,IE and i declared the command as follows

-browser browserName=firefox,version=12,maxInstances=5,platform=WINDOWS

-browser browserName=InternetExplorer,version=9.0,maxInstances=5,platform= WINDOWS

Using above command we can run 5 instances of Firefox 12 and as well as 5 instances of IE9 at the same time in remote machine. So total user can run 10 instances of different browsers (FF12 & IE9) in parallel.

1. **MaxSession** This says....how many browsers (*Any Browser and any version*) can run in parallel at a time in the remote system. So this overrides the Max Instances settings and can restrict the number of browser instances that can run in parallel.

For above example, when maxSession=1 forces that you never have more than 1 browser running.

With maxSession=2 you can have 2 Firefox tests at the same time, or 1 Internet Explorer and 1 Firefox test).

-browser browserName=chrome,maxInstance=3 -browser browserName=firefox,maxInstance=3

//Selenium grid example test

package com.grid.ex;

import java.io.File;

import java.net.URL;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.remote.DesiredCapabilities;

import org.openqa.selenium.remote.RemoteWebDriver;

import org.testng.Reporter;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

public class gridtest1 {

WebDriver driver;

@BeforeTest

public void setUp() throws Exception{

DesiredCapabilities capability =DesiredCapabilities.firefox();

driver =new RemoteWebDriver(new URL("http://192.168.0.101:5555/wd/hub"), capability);

driver.get("http://localhost/orangehrm/symfony/web/index.php/auth/login");

driver.manage().window().maximize();

}

@Test()

public void loginTest1() {

//Login

driver.findElement(By.xpath("//input[@id='txtUsername']")).sendKeys("admin");

driver.findElement(By.id("txtPassword")).sendKeys("sudhakar");

driver.findElement(By.id("btnLogin")).click();

}

@AfterTest

public void afterTest() {

driver.close();

}

}