

Phase – 5 Practice Project: Assisted Practice

13. Grid Configuration Using JSON.

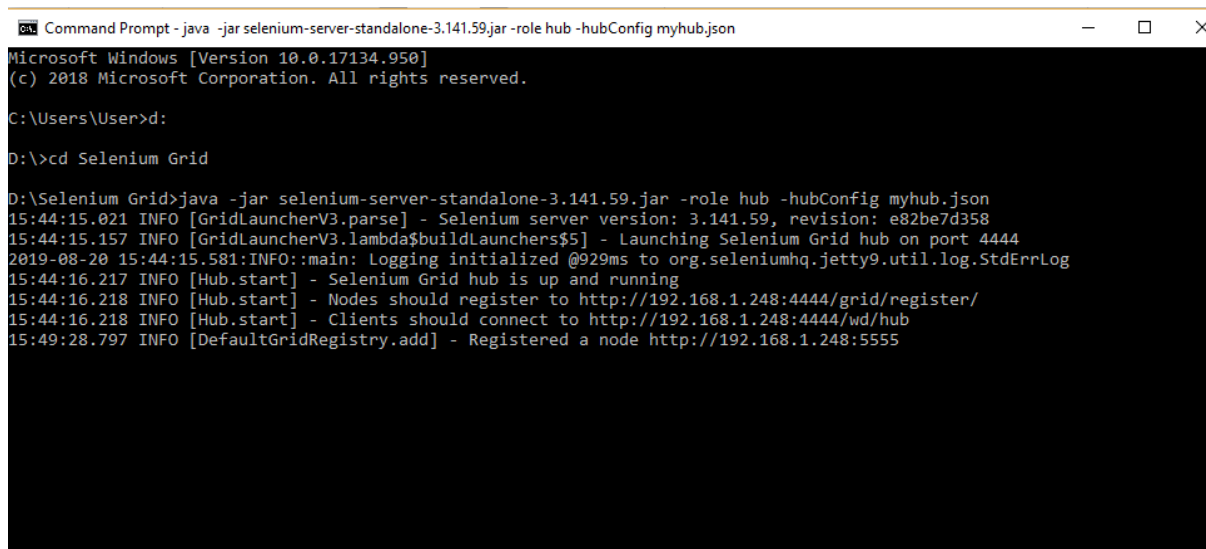
✓ Configuring the grid hub using JSON

- a. Create JSON file for the hub which looks like

```
{
  "port": 4444,
  "newSessionWaitTimeout": -1,
  "servlets": [],
  "withoutServlets": [],
  "custom": {},
  "capabilityMatcher": "org.openqa.grid.internal.utils.DefaultCapabilityMatcher",
  "throwOnCapabilityNotPresent": true,
  "cleanupCycle": 5000,
  "role": "hub",
  "debug": false,
  "browserTimeout": 0,
  "timeout": 1800
}
```

- b. Save it in a folder with a valid name (example: myhub) in which we have saved Selenium standalone Server jar file
- c. Go to command prompt
- d. Navigate to folder structure where you have saved the Selenium standalone Server jar file
- e. Type the below command in command prompt

Java -jar selenium-server-standalone-3.141.59.jar -role hub -hubConfig myhub.json
and click on **Enter** button, which looks like



```
Command Prompt - java -jar selenium-server-standalone-3.141.59.jar -role hub -hubConfig myhub.json
Microsoft Windows [Version 10.0.17134.950]
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C:\Users\User>d:

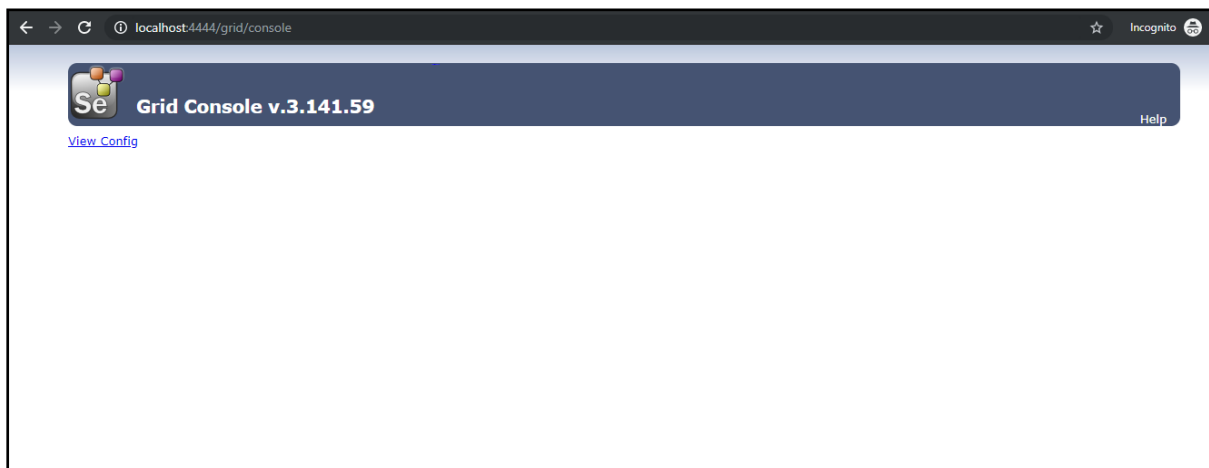
D:\>cd Selenium Grid

D:\Selenium Grid>java -jar selenium-server-standalone-3.141.59.jar -role hub -hubConfig myhub.json
15:44:15.021 INFO [GridLauncherV3.parse] - Selenium server version: 3.141.59, revision: e82be7d358
15:44:15.157 INFO [GridLauncherV3.lambda$buildLaunchers$5] - Launching Selenium Grid hub on port 4444
2019-08-20 15:44:15.581:INFO::main: Logging initialized @929ms to org.seleniumhq.jetty9.util.log.StdErrLog
15:44:16.217 INFO [Hub.start] - Selenium Grid hub is up and running
15:44:16.218 INFO [Hub.start] - Nodes should register to http://192.168.1.248:4444/grid/register/
15:44:16.218 INFO [Hub.start] - Clients should connect to http://192.168.1.248:4444/wd/hub
15:49:28.797 INFO [DefaultGridRegistry.add] - Registered a node http://192.168.1.248:5555
```

- f. Open the Chrome browser

g. Enter URL as 'http://localhost:4444/grid/console' and click on enter

h. Grid console page is loaded as below



✓ Configuring the grid nodes using JSON

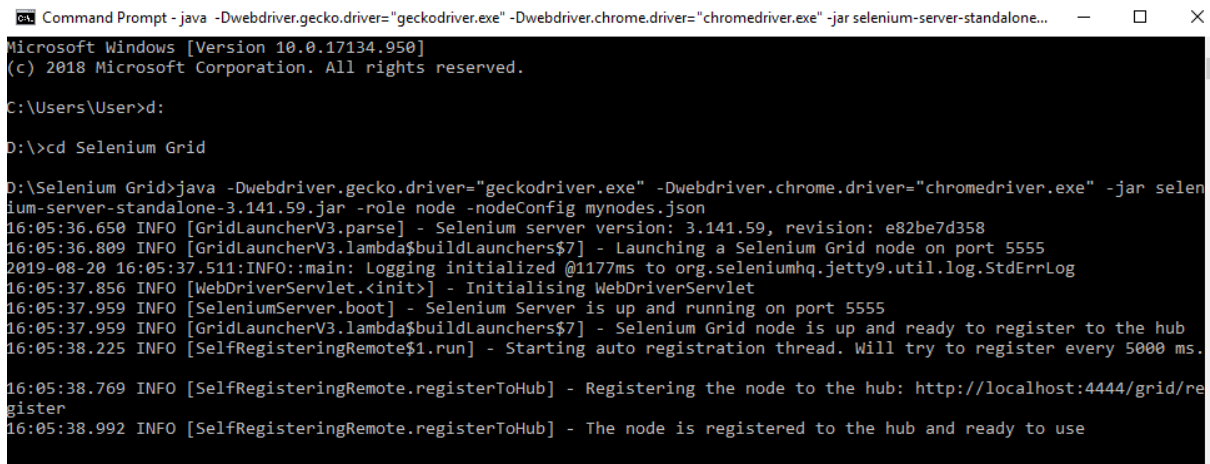
a. Once the Selenium Grid Hub using JSON is configured, the next step is to configure Selenium Grid nodes using JSON.

b. Create JSON file for node, which looks like:

```
{
  "capabilities": [
    {
      "browserName": "firefox",
      "maxInstances": 5,
      "seleniumProtocol": "WebDriver"
    },
    {
      "browserName": "chrome",
      "maxInstances": 5,
      "seleniumProtocol": "WebDriver"
    }
  ],
  "proxy": "org.openqa.grid.selenium.proxy.DefaultRemoteProxy",
  "maxSession": 5,
  "port": 5555,
  "register": true,
  "registerCycle": 5000,
  "hub": "http://localhost:4444",
  "nodeStatusCheckTimeout": 5000,
  "nodePolling": 5000,
  "role": "node",
  "unregisterIfStillDownAfter": 60000,
  "downPollingLimit": 2,
  "debug": false,
  "servlets": [],
  "withoutServlets": [],
  "custom": {}
}
```

- c. Save it in a folder with a valid name (example: mynode) in which we have saved Selenium standalone Server jar file
- d. Open the new command prompt
- e. Navigate to the folder structure where you have saved the Selenium standalone server jar file
- f. Type the below command in command prompt

java -Dwebdriver.gecko.driver="geckodriver.exe" -Dwebdriver.chrome.driver="chromedriver.exe" -jar selenium-server-standalone-3.141.59.jar -role node -nodeConfig mynodes.json and click on Enter button, which looks like



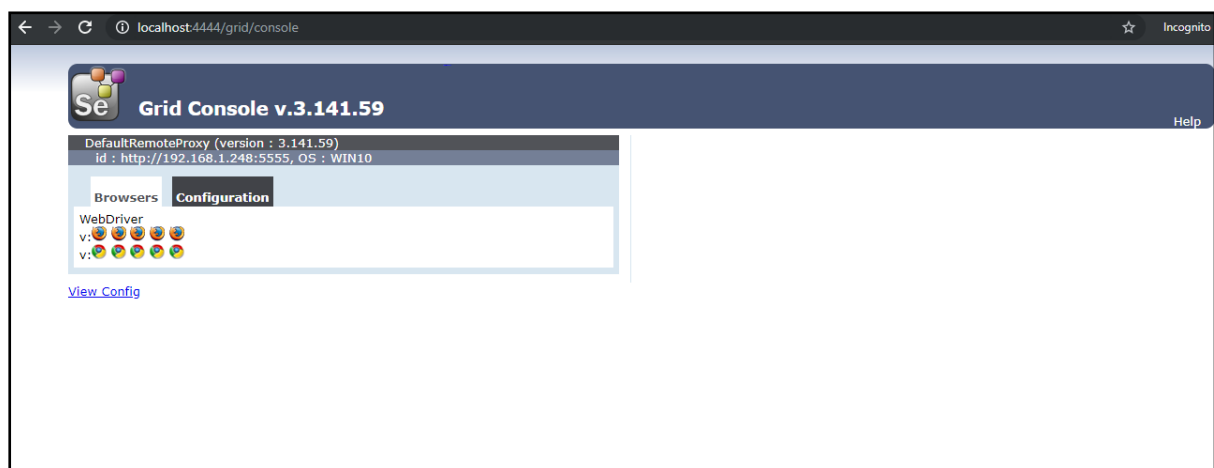
```

Microsoft Windows [Version 10.0.17134.950]
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C:\Users\User>cd Selenium Grid

D:\Selenium Grid>java -Dwebdriver.gecko.driver="geckodriver.exe" -Dwebdriver.chrome.driver="chromedriver.exe" -jar selenium-server-standalone-3.141.59.jar -role node -nodeConfig mynodes.json
16:05:36.650 INFO [GridLauncherV3.parse] - Selenium server version: 3.141.59, revision: e82be7d358
16:05:36.809 INFO [GridLauncherV3.lambda$buildLaunchers$7] - Launching a Selenium Grid node on port 5555
2019-08-20 16:05:37.511:INFO::main: Logging initialized @1177ms to org.seleniumhq.jetty9.util.log.StdErrLog
16:05:37.856 INFO [WebDriverServlet.<init>] - Initialising WebDriverServlet
16:05:37.959 INFO [SeleniumServer.boot] - Selenium Server is up and running on port 5555
16:05:37.959 INFO [GridLauncherV3.lambda$buildLaunchers$7] - Selenium Grid node is up and ready to register to the hub
16:05:38.225 INFO [SelfRegisteringRemote$1.run] - Starting auto registration thread. Will try to register every 5000 ms.
16:05:38.769 INFO [SelfRegisteringRemote.registerToHub] - Registering the node to the hub: http://localhost:4444/grid/register
16:05:38.992 INFO [SelfRegisteringRemote.registerToHub] - The node is registered to the hub and ready to use
  
```

- g. Open the browser
- h. Enter URL as **http://localhost:4444/grid/console** and click on Enter
- i. Grid console page is loaded, which shows **Browsers** by default



- j. Click on **Configuration** which shows Configuration details

← → ↻ localhost:4444/grid/console

☆ Incognito

Se

Grid Console v.3.141.59

Help

DefaultRemoteProxy (version : 3.141.59)

id : http://192.168.1.248:5555, OS : WIN10

Browsers

Configuration

browserTimeout: 0

debug: false

host: 192.168.1.248

port: 5555

role: node

timeout: 1800

cleanUpCycle: 5000

maxSession: 5

capabilities: Capabilities {browserName: firefox, maxInstances: 5, platform: WIN10, platformName: WIN10, seleniumProtocol: WebDriver, server:CONFIG_UUID: 85604c4a-1884-40db-aeab-01b...}

capabilities: Capabilities {browserName: chrome, maxInstances: 5, platform: WIN10, platformName: WIN10, seleniumProtocol: WebDriver, server:CONFIG_UUID: 5540c1dd-e97b-4586-8c7d-599...}

downPollingLimit: 2

hub: http://localhost:4444

id: http://192.168.1.248:5555

nodePolling: 5000

nodeStatusCheckTimeout: 5000

proxy: org.openqa.grid.selenium.proxy.DefaultRemoteProxy

register: true

registerCycle: 5000

remoteHost: http://192.168.1.248:5555

unregisterIfStillDownAfter: 60000

View Config