

ASSISTED PRACTICE PROJECT

Set Up Selenium Grid

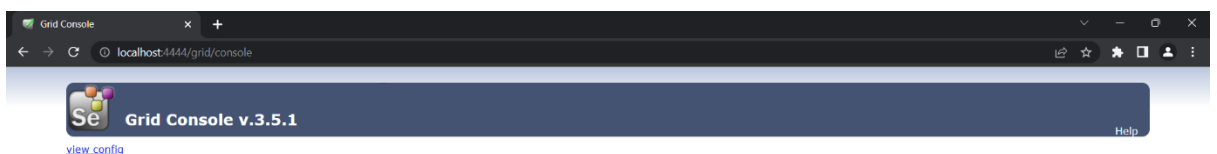
Step 1: Setting up Selenium Grid hub

- Download Selenium standalone Server jar file.
- Go to command prompt
- Navigate to folder structure where you have saved the Selenium standalone Server jar file
- Type the below command in command prompt

Java -jar selenium-server-standalone-3.5.1.jar -role hub and click on **Enter** button

```
C:\Users\admin\Downloads>Java -jar selenium-server-standalone-3.5.1.jar -role hub
12:09:35.372 INFO - Selenium build info: version: '3.5.1', revision: '9c21bb67ef'
12:09:35.373 INFO - Launching Selenium Grid hub
2022-10-01 12:09:36.743:INFO::main: Logging initialized @61972ms to org.seleniumhq.jetty9.util.log.StdErrLog
12:09:36.764 INFO - Will listen on 4444
2022-10-01 12:09:36.833:INFO:osjs.Server:main: jetty-9.4.5.v20170502
2022-10-01 12:09:36.879:INFO:osjs.session:main: DefaultSessionIdManager workerName=node0
2022-10-01 12:09:36.879:INFO:osjs.session:main: No SessionScavenger set, using defaults
2022-10-01 12:09:36.891:INFO:osjs.session:main: Scavenging every 600000ms
2022-10-01 12:09:36.903:INFO:osjs.ContextHandler:main: Started o.s.j.s.ServletContextHandler@3cce5371{/,null,AVAILABLE}
2022-10-01 12:09:36.991:INFO:osjs.AbstractConnector:main: Started ServerConnector@465232e9{HTTP/1.1,[http/1.1]}{0.0.0.0:4444}
2022-10-01 12:09:36.992:INFO:osjs.Server:main: Started @62222ms
12:09:36.994 INFO - Nodes should register to http://192.168.1.34:4444/grid/register/
12:09:36.995 INFO - Selenium Grid hub is up and running
```

- Open the Chrome browser
- Enter URL as **http://localhost:4444/grid/console** and click on **Enter**
- Grid console page is loaded as below



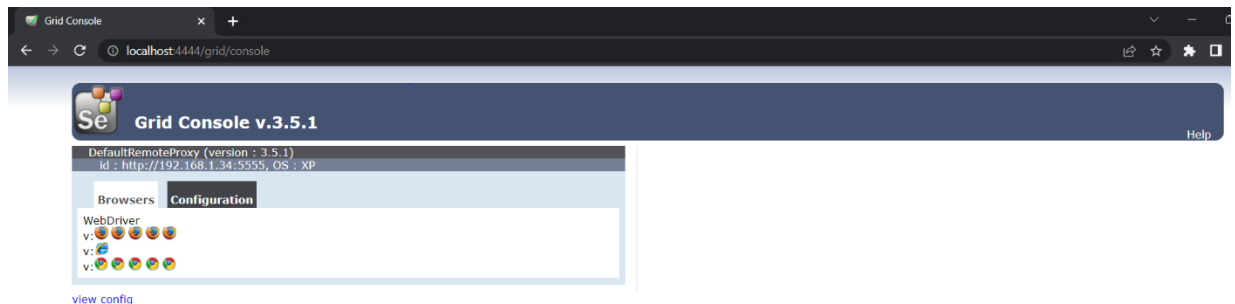
Step 2: Setting up the Selenium Grid Nodes

- Once the Selenium Grid Hub is set up, the next step is to set up Selenium Grid nodes.
- Open the new command prompt
- Navigate to the folder structure where you have saved the Selenium standalone server jar file
- Type the below command in command prompt

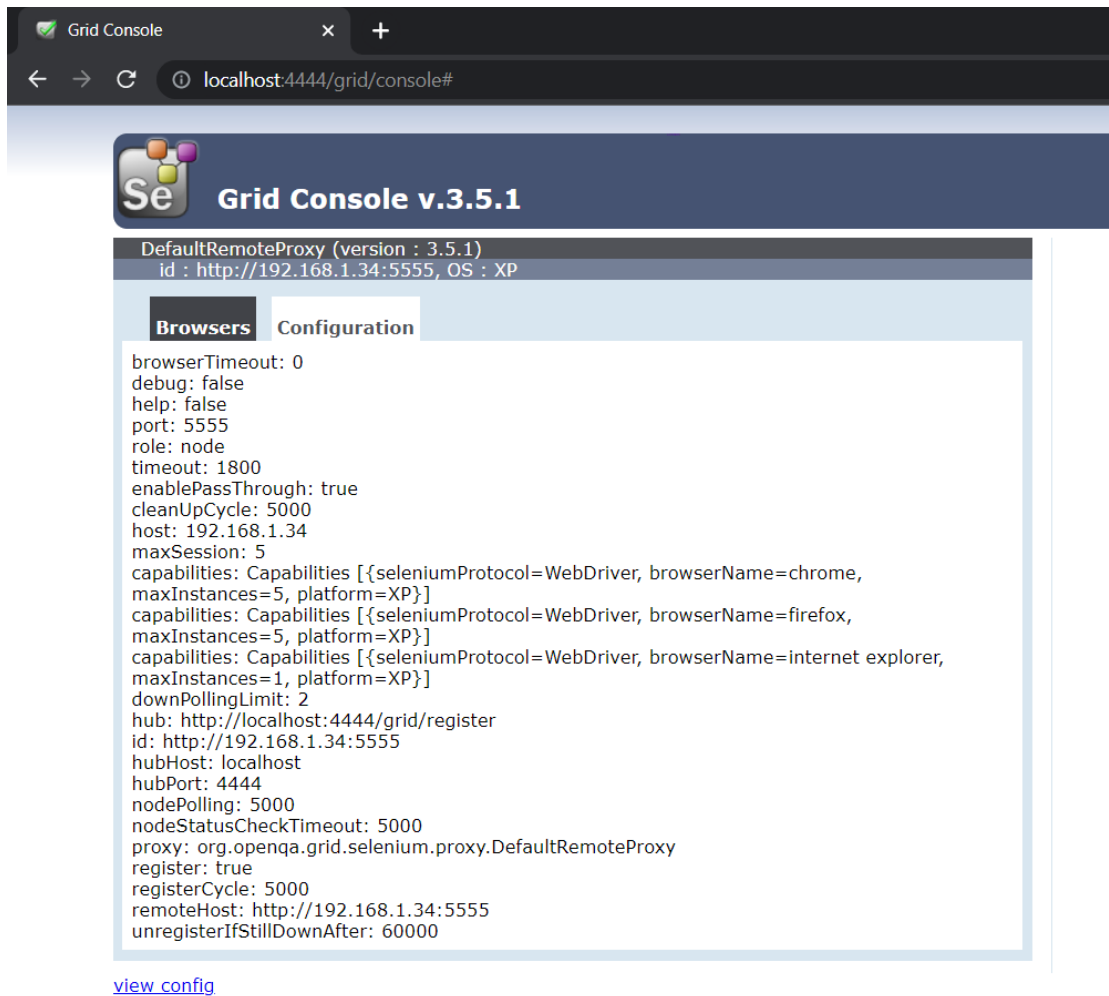
java -jar selenium-server-standalone-3.5.1.jar -role node -hub <http://localhost:4444/grid/register>
and click on **Enter** button, which looks like

```
C:\Users\admin\Downloads>java -jar selenium-server-standalone-3.5.1.jar -role node -hub http://localhost:4444/grid/register
12:13:15.269 INFO - Selenium build info: version: '3.5.1', revision: '9c21bb67ef'
12:13:15.271 INFO - Launching a Selenium Grid node
2022-10-01 12:13:16.741:INFO:main: Logging initialized @1809ms to org.seleniumhq.jetty9.util.log.StdErrLog
12:13:16.822 INFO - Driver class not found: com.opera.core.systems.OperaDriver
12:13:16.850 INFO - Driver provider class org.openqa.selenium.safari.SafariDriver registration is skipped:
registration capabilities Capabilities [{browserName=safari, version=, platform=MAC}] does not match the current platform XP
12:13:16.891 INFO - Using the passthrough mode handler
2022-10-01 12:13:16.924:INFO:osjs.Server:main: jetty-9.4.5.v20170502
2022-10-01 12:13:16.954:WARN:osjs.SecurityHandler:main: ServletContext@o.s.j.s.ServletContextHandler@7776ab{/,null,STARTING} has uncovered http methods for path: /
2022-10-01 12:13:16.961:INFO:osjs.ContextHandler:main: Started o.s.j.s.ServletContextHandler@7776ab{/,null,AVAILABLE}
2022-10-01 12:13:17.009:INFO:osjs.AbstractConnector:main: Started ServerConnector@18031cbf[HTTP/1.1,[http/1.1]]{0.0.0.0:5555}
2022-10-01 12:13:17.009:INFO:osjs.Server:main: Started @2078ms
12:13:17.011 INFO - Selenium Grid node is up and ready to register to the hub
12:13:17.032 INFO - Starting auto registration thread. Will try to register every 5000 ms.
12:13:17.033 INFO - Registering the node to the hub: http://localhost:4444/grid/register
12:13:17.848 INFO - The node is registered to the hub and ready to use
2022-10-01 12:13:23.140:INFO:osjs.hc.ROOT:qtp1371376476-15: org.openqa.selenium.remote.server.WebDriverServlet-6ccdb29f: Initialising WebDriverServlet
12:13:23.166 INFO - Found handler: org.openqa.selenium.remote.server.commandhandler.Status@27298492
12:13:23.173 INFO - /status: Executing GET on /status (handler: Status)
```

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



Click on **Configuration**, which shows Configuration details



The screenshot shows a web browser window with the title 'Grid Console'. The address bar displays 'localhost:4444/grid/console#'. The page header features the Selenium logo and the text 'Grid Console v.3.5.1'. Below the header, a dark bar indicates the current node is a 'DefaultRemoteProxy (version : 3.5.1)' with ID 'http://192.168.1.34:5555, OS : XP'. Two tabs are visible: 'Browsers' and 'Configuration', with 'Configuration' being the active tab. The main content area displays a list of configuration parameters for the node.

```
browserTimeout: 0
debug: false
help: false
port: 5555
role: node
timeout: 1800
enablePassThrough: true
cleanUpCycle: 5000
host: 192.168.1.34
maxSession: 5
capabilities: Capabilities [{seleniumProtocol=WebDriver, browserName=chrome,
maxInstances=5, platform=XP}]
capabilities: Capabilities [{seleniumProtocol=WebDriver, browserName=firefox,
maxInstances=5, platform=XP}]
capabilities: Capabilities [{seleniumProtocol=WebDriver, browserName=internet explorer,
maxInstances=1, platform=XP}]
downPollingLimit: 2
hub: http://localhost:4444/grid/register
id: http://192.168.1.34:5555
hubHost: localhost
hubPort: 4444
nodePolling: 5000
nodeStatusCheckTimeout: 5000
proxy: org.openqa.grid.selenium.proxy.DefaultRemoteProxy
register: true
registerCycle: 5000
remoteHost: http://192.168.1.34:5555
unregisterIfStillDownAfter: 60000
```

[view config](#)