

# SELENIUM – ENVIRONMENT SETUP

Lecture Notes

## A COMPLETE GUIDE FOR BEGINNERS

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### Selenium – Environment Setup

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#### **Download Selenium WebDriver Java Client**

Selenium WebDriver supports many languages and each language has its own client driver. Here we are configuring selenium 2 with java so we need 'webdriver Java client driver'.

Using the following steps one can download the Selenium WebDriver for Java Client.

#### Step 1:

Go to "docs.seleniumhq.org/downloads/" and download the latest Selenium Standalone Server. (During this lecture preparation the latest version is 3.4.0)

#### Selenium Client & WebDriver Language Bindings

In order to create scripts that interact with the Selenium Server (Selenium RC, Selenium Remote WebDriver) or create local Selenium WebDriver scripts, you need to make use of language-specific client drivers. These languages include both 1.x and 2.x style clients.

While language bindings for other languages exist, these are the core ones that are supported by the main project hosted on google code.

| Language          | Client Version | Release Date |                 |            |                |
|-------------------|----------------|--------------|-----------------|------------|----------------|
| Java              | 3.4.0          | 2017-04-21   | Download        | Change log | <u>Javadoc</u> |
| C#                | 3.4.0          | 2017-04-21   | <u>Download</u> | Change log | API docs       |
| Ruby              | 3.4.3          | 2017-06-15   | <u>Download</u> | Change log | API docs       |
| Python            | 3.4.3          | 2017-05-30   | <u>Download</u> | Change log | API docs       |
| Javascript (Node) | 3.4.0          | 2017-04-21   | <u>Download</u> | Change log | API docs       |

#### Step 2:

Save the .zip file to you disk.

#### Step 3:

Once you have downloaded the archive you will need to **Extract** the zip file, which will create the unzipped Selenium Java folder.

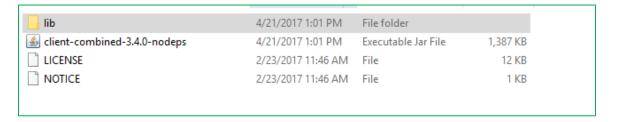
#### Step 4:

Once the extraction process is complete, **Open** the Selenium folder.



#### Step 5:

There will be 'libs' folder, 1 jar file, 1 License file, and 1 Notice file in unzipped folder as shown in bellow figure. We will use all these files for configuring WebDriver in Eclipse.



#### **Configure Eclipse with Selenium WebDriver**

To configure Eclipse with Selenium WebDriver, we need to perform the following activities:

- Launch the Eclipse IDE & Create a Workspace
- Create a new Project
- Create a new Package
- Create a new Class
- Add External libraries to the project

As we know how to write java program in Eclipse, we are not going to cover Launching Eclipse, Creating new project, package and class.

Once create a project, package and class have created we need to add Selenium WebDriver's Jar files in to Java build path.

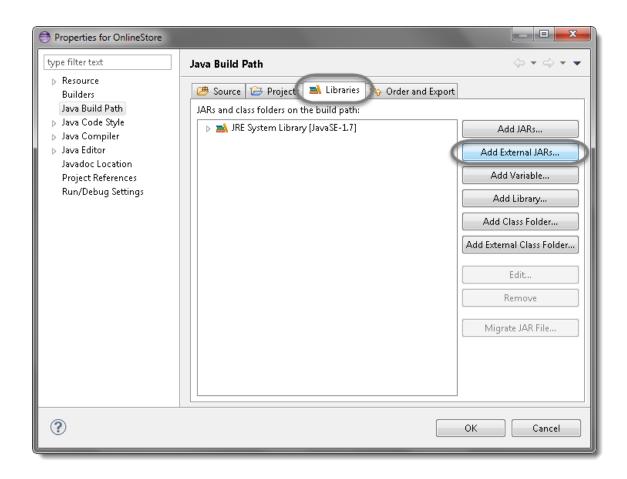
#### Add External Jars to Java build path

#### Step 1:

Right click on Project then select Properties. Click on Java Build Path from left panel.



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#### Step 2:

Add Selenium Java jar.

| Name                           | Date modified      | Туре                | Size     |
|--------------------------------|--------------------|---------------------|----------|
| lib                            | 4/21/2017 1:01 PM  | File folder         |          |
| 🖺 client-combined-3.4.0-nodeps | 4/21/2017 1:01 PM  | Executable Jar File | 1,387 KB |
| LICENSE                        | 2/23/2017 11:46 AM | File                | 12 KB    |
| NOTICE                         | 2/23/2017 11:46 AM | File                | 1 KB     |



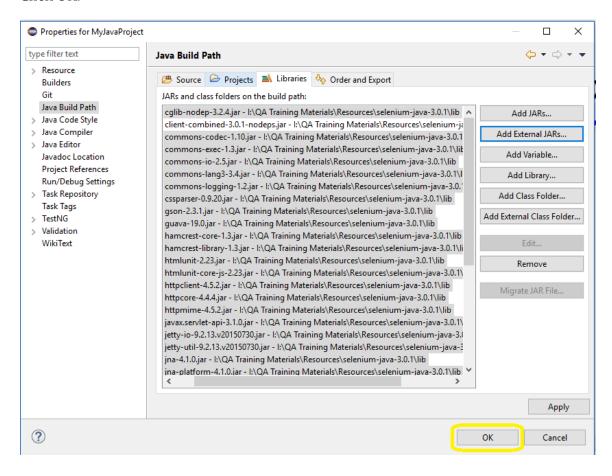
**Step 3:**Add all the jars from the *libs* folder as well.

| elenium-java-3.4.0 > lib           |                   |                     |         |
|------------------------------------|-------------------|---------------------|---------|
| Name                               | Date modified     | Туре                | Size    |
| 🖺 cglib-nodep-3.2.4                | 4/21/2017 1:01 PM | Executable Jar File | 343 KI  |
| 🖺 commons-codec-1.10               | 4/21/2017 1:01 PM | Executable Jar File | 278 KI  |
| ≦ commons-exec-1.3                 | 4/21/2017 1:01 PM | Executable Jar File | 54 KI   |
| 🖺 commons-io-2.5                   | 4/21/2017 1:01 PM | Executable Jar File | 204 Ki  |
| ≦ commons-lang3-3.5                | 4/21/2017 1:01 PM | Executable Jar File | 469 KI  |
| 🖺 commons-logging-1.2              | 4/21/2017 1:01 PM | Executable Jar File | 61 KI   |
| ≦ cssparser-0.9.22                 | 4/21/2017 1:01 PM | Executable Jar File | 373 KI  |
| <u>≨</u> gson-2.8.0                | 4/21/2017 1:01 PM | Executable Jar File | 227 KI  |
| <b>≦</b> guava-21.0                | 4/21/2017 1:01 PM | Executable Jar File | 2,463 K |
| ≦ hamcrest-core-1.3                | 4/21/2017 1:01 PM | Executable Jar File | 44 K    |
| ≨ htmlunit-2.26                    | 4/21/2017 1:01 PM | Executable Jar File | 1,933 K |
| ≨ htmlunit-core-js-2.26            | 4/21/2017 1:01 PM | Executable Jar File | 1,187 K |
| 🕯 htmlunit-driver-2.26             | 4/21/2017 1:01 PM | Executable Jar File | 73 K    |
| httpclient-4.5.3                   | 4/21/2017 1:01 PM | Executable Jar File | 731 K   |
| ≨ httpcore-4.4.6                   | 4/21/2017 1:01 PM | Executable Jar File | 317 K   |
| httpmime-4.5.3                     | 4/21/2017 1:01 PM | Executable Jar File | 41 K    |
| 🕌 javax.servlet-api-3.1.0          | 4/21/2017 1:01 PM | Executable Jar File | 94 K    |
| 🕯 jetty-io-9.4.1.v20170120         | 4/21/2017 1:01 PM | Executable Jar File | 128 K   |
| 🕯 jetty-util-9.4.1.v20170120       | 4/21/2017 1:01 PM | Executable Jar File | 442 K   |
| 🟂 jna-4.1.0                        | 4/21/2017 1:01 PM | Executable Jar File | 894 K   |
| 🖆 jna-platform-4.1.0               | 4/21/2017 1:01 PM | Executable Jar File | 1,431 K |
| 🖆 junit-4.12                       | 4/21/2017 1:01 PM | Executable Jar File | 308 K   |
| 🖆 neko-htmlunit-2.25               | 4/21/2017 1:01 PM | Executable Jar File | 127 K   |
| 🖆 phantomjsdriver-1.4.0            | 4/21/2017 1:01 PM | Executable Jar File | 12 K    |
| <b>≦</b> sac-1.3                   | 4/21/2017 1:01 PM | Executable Jar File | 16 K    |
| 🖆 serializer-2.7.2                 | 4/21/2017 1:01 PM | Executable Jar File | 270 K   |
| 🕯 websocket-api-9.4.3.v20170317    | 4/21/2017 1:01 PM | Executable Jar File | 42 K    |
| 🕯 websocket-client-9.4.3.v20170317 | 4/21/2017 1:01 PM | Executable Jar File | 31 K    |
| 🕯 websocket-common-9.4.3.v20170317 | 4/21/2017 1:01 PM | Executable Jar File | 195 K   |
| ≨ xalan-2.7.2                      | 4/21/2017 1:01 PM | Executable Jar File | 3,081 K |
| 🚣 xerceslmpl-2.11.0                | 4/21/2017 1:01 PM | Executable Jar File | 1,336 K |
| 🖆 xml-apis-1.4.01                  | 4/21/2017 1:01 PM | Executable Jar File | 216 K   |
|                                    |                   |                     |         |



#### Step 4:

#### Click OK.



That's all about *configuration of WebDriver with eclipse*. Now we are ready to write our test script in eclipse and run it in WebDriver.

