

# What all JAR files are needed for Appium?

Well, a good thing about Appium is that it doesn't need a lot of JAR files for its functioning. There are only 2 different set of JARs that you need to download. These are:

- Selenium WebDriver Jars
- Appium Java Client Jar

**Update [13 Jan 2017]:** In the older versions of Selenium Webdriver, JUnit and few other Jars files were included in the Selenium Webdriver package. So when you downloaded Selenium Webdriver, these Jar files were included there. Due to this, you were not required to download these separately.

**But with the newer Selenium Webdriver, JUnit and these other Jars are not a part of it. And hence you need to download these separately. This has been added at the end of this article.**

## WHAT JARS ARE NEEDED FOR APPIUM SETUP

**SELENIUM  
WEBDRIVER  
JARS**

**APPIUM  
JAVA CLIENT  
JAR**

You can write Appium test scripts in many different programming languages, but this tutorial series is based on Java. So we will download Java based Jars for Appium. Let us now start with the Appium jars download process.

# Download Selenium WebDriver Jars

Before we start – did you ever wonder as to **why you need to download Selenium WebDriver jars for Appium?** In very simple terms, Appium uses similar logic that is used by Selenium to interact with browsers. Appium uses Selenium's protocols and then extends it to add many mobile specific capabilities.

Due to this, when you work with Appium scripts you will be able to use common Selenium methods such as `click()`, `sendKeys()` etc. Together with that you will also have many mobile specific functions at your disposal, such as `swipe()`, `zoom()`, `pinch()` etc. Let us now look at the steps that you would need to follow to download Selenium WebDriver jars –

**Important Note:** We try to keep our articles up to date with the latest versions of all the JAR files. But sometimes it might happen that our articles don't reflect the latest updates. If you happen to see such a case, then please download and use the latest JAR files for both Selenium and Appium.

**Step1:** Open the official website for selenium's download page –  
<http://www.seleniumhq.org/download/>

You will see a section called “**Selenium Client & WebDriver Language Bindings**”. Here you will see download links next to different languages. Since we will be using Java with Selenium, you will need to download Java specific drivers. To do so, click on “Download” from the “Java” section as shown below-

## 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.

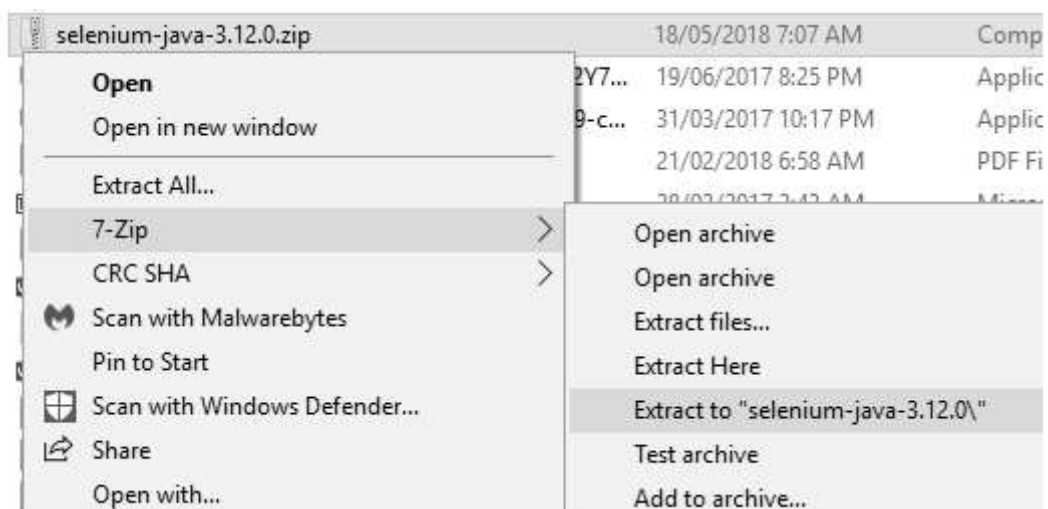
Language	Client Version	Release Date			
Java	3.12.0	2018-05-08	<a href="#">Download</a>	<a href="#">Change log</a>	<a href="#">Javadoc</a>
C#	3.12.0	2018-05-08	<a href="#">Download</a>	<a href="#">Change log</a>	<a href="#">API docs</a>
Ruby	3.12.0	2018-05-08	<a href="#">Download</a>	<a href="#">Change log</a>	<a href="#">API docs</a>
Python	3.12.0	2018-05-08	<a href="#">Download</a>	<a href="#">Change log</a>	<a href="#">API docs</a>
Javascript (Node)	4.0.0-alpha.1	2018-01-13	<a href="#">Download</a>	<a href="#">Change log</a>	<a href="#">API docs</a>

### C# NuGet

NuGet latest release is 3.12.0, Released on 2018-05-08

- [WebDriver](#)
- [WebDriverBackedSelenium](#)

**Step2:** You will see a pop-up message asking for saving the file. Selenium Webdriver JAR would start downloading now into the default download location on your system. Once the file is downloaded, unzip it. We are using “7-zip” here to extract the files, but you can use extractor of your choice



**Step3:** Open the unzipped folder. It would look something like shown in the below image. The JAR file names might change depending on the version you are downloading. Generally speaking, you should find a **lib** folder and one or two other JAR files in the Selenium folder. You would also see some other files such as LICENSE, NOTICE etc.

	Name	Date modified	Type
★ Quick access			
Desktop	libs	1/02/1985 1:00 AM	File folder
Downloads	CHANGELOG	1/02/1985 1:00 AM	File
Documents	client-combined-3.12.0.jar	1/02/1985 1:00 AM	Executable Jar File
Pictures	client-combined-3.12.0-sources.jar	1/02/1985 1:00 AM	Executable Jar File
Google Drive	LICENSE	1/02/1985 1:00 AM	File
	NOTICE	1/02/1985 1:00 AM	File

By following the above procedure we have successfully completed downloading the Selenium Webdriver jars. Now let us proceed with the second part of this article explaining the downloading process of Appium Java Client jar.

# Download Appium Java Client Jar

Please follow the below steps to download Appium jar files:

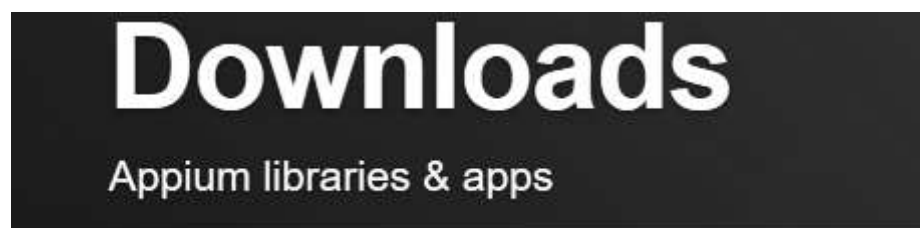
**Step 1:** Open the official website for Appium – <http://appium.io/>. Click the “Downloads” tab highlighted in the below image.



**Step 2:** When you click “Downloads” tab, you will see a new page which shows the Appium libraries and apps for download. Under the section “Appium Client Libraries” you will find multiple language bindings listed –

- Ruby
- Python
- Java
- JavaScript
- PHP
- C#
- RobotFramework

As we are using java here , Click on “Java” from the list as shown below-



## Appium Client Libraries

Appium has language bindings for:

- Ruby
- Python
- Java 
- JavaScript
- PHP
- C#
- RobotFramework

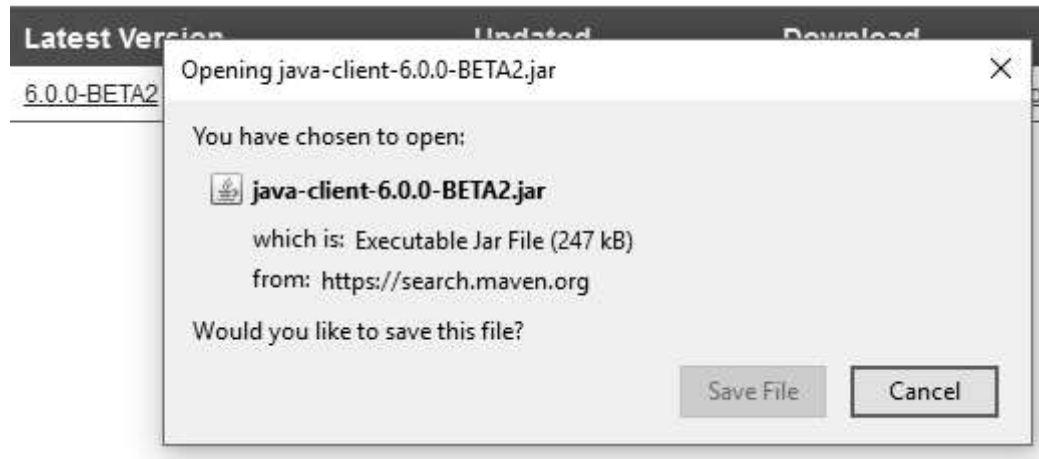
**Step 3:** The Maven Central Repository page opens as soon as you click “Java”. Now here you will see the download link for the latest version of Appium jars . Click on “jar” link under the download tab as shown below-



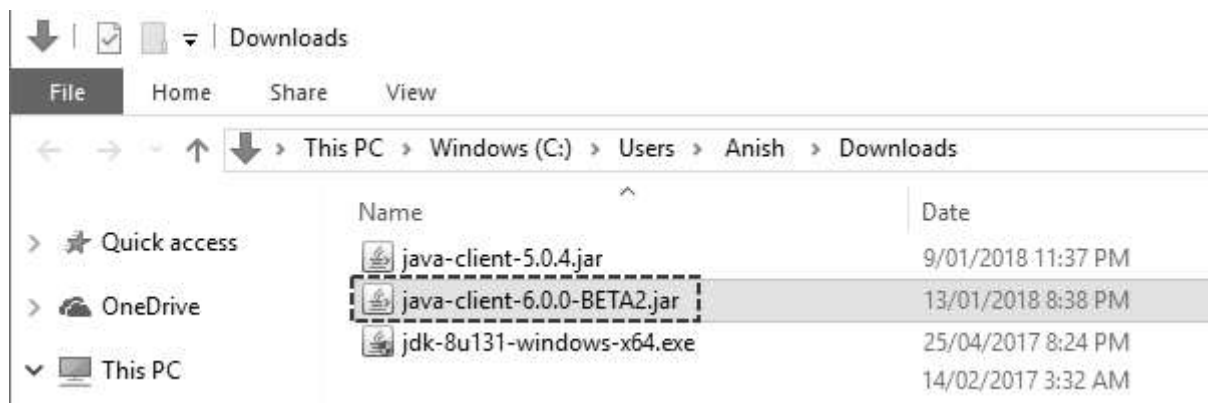
### Search Results

GroupId	ArtifactId	Latest Version	Updated	Download
<a href="#">io.appium</a>	<a href="#">java-client</a>	<a href="#">6.0.0-BETA2</a> <a href="#">all (42)</a>	24-Dec-2017	<a href="#">pom</a> <a href="#">jar</a> <a href="#">javadoc.jar</a> <a href="#">sources</a>

**Step 4:** Now you will see an interactive pop-up window that appears asking for saving the downloaded file



**Step 5:** Click on “Save File” to download the Jar file to your machine. Appium java-client j would now start downloading and will be saved in the default download path of your system. The downloaded jar file would look something like this as shown in the below image:



# Download JUnit JAR

Follow the steps given below to download JUnit JAR from Maven Repository –

**Step 1:** Open JUnit maven repository using this link –  
<https://mvnrepository.com/artifact/junit/junit/4.12>

**Step 2:** Click on the **jar** link to download the JAR file

**JUnit » 4.12**

JUnit is a unit testing framework for Java, created by Erich Gamma and I

License	EPL 1.0
Categories	Testing Frameworks
Organization	JUnit
HomePage	http://junit.org
Date	(Dec 04, 2014)
Files	<a href="#">pom (23 KB)</a> <a href="#">jar (307 KB)</a> <a href="#">View All</a>
Repositories	<a href="#">Central</a> <a href="#">Aspose</a> <a href="#">Redhat GA</a> <a href="#">Sonatype Releases</a>
Used By	64,276 artifacts

**Step 3:** Save the JUnit jar file on your machine

HomePage	http://junit.org
Date	(Dec 04, 2014)
Files	<a href="#">pom (23 KB)</a> <a href="#">jar (307 KB)</a> <a href="#">View All</a>
Repositories	<a href="#">Central</a> <a href="#">Aspose</a>
Used By	64,276 artifacts

Maven
Gradle
SBT
Ivy
Grape

```

<dependency>
  <groupId>junit</groupId>
  <artifactId>junit</artifactId>
  <version>4.12</version>
  <scope>test</scope>
</dependency>

```

Opening junit-4.12.jar
You have chosen to open:
 **junit-4.12.jar**
which is: Executable Jar File (308 kB)
from: http://central.maven.org
Would you like to save this file?
Save File Cancel

# Download other JAR files

Using the same process as used for JUnit, download **hamcrest-core** and **commons-lang** JAR files from maven repository. The links for both these JAR files is given below –

- **hamcrest-core:** <https://mvnrepository.com/artifact/org.hamcrest/hamcrest-core/1.3>
- **commons-lang:** <https://mvnrepository.com/artifact/org.apache.commons/commons-lang3/3.7>

