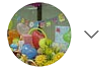


Open in app ↗



# Install Oracle JDK 1.8 and Set environment variables in Ubuntu

Step-by-step guide on installing JDK8(Version 1.8)



Hirosh Tharaka (BSc.Hons, CTFL) · [Follow](#)

3 min read · May 17, 2019



Listen



Share



More

Some of the environments or projects you work with may specifically need the Java8 (JDK-1.8) for the references. In such instances, the ideal solution is to download the jdk.tar.gz file from the oracle.com and install it from the terminal without depending to apt-get or any other.

The following is the step-by-step guide of how to install and set the environment-variable paths successfully.

## Prerequisites:

Download the JavaSE Development Kit 8 from the given link below.

URL : <https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html> (Linux x64 : jdk-8u211-linux-x64.tar.gz)

| Java SE Development Kit 8u211   |           |   |
|---|-----------|---|
| You must accept the <a href="#">Oracle Technology Network License Agreement for Oracle Java SE</a> to download this software. |           |   |
| <input type="radio"/> Accept License Agreement <input checked="" type="radio"/> Decline License Agreement                     |           |   |
| Product / File Description  | File Size | Download  |
| Linux ARM 32 Hard Float ABI   | 72.86 MB  | <a href="#">jdk-8u211-linux-arm32-vfp-hflt.tar.gz</a> |
| Linux ARM 64 Hard Float ABI   | 69.76 MB  | <a href="#">jdk-8u211-linux-arm64-vfp-hflt.tar.gz</a> |
| Linux x86   | 174.11 MB | <a href="#">jdk-8u211-linux-i586.rpm</a>              |
| Linux x86   | 188.92 MB | <a href="#">jdk-8u211-linux-i586.tar.gz</a>           |
| Linux x64   | 171.13 MB | <a href="#">jdk-8u211-linux-x64.rpm</a>               |
| Linux x64   | 185.96 MB | <a href="#">jdk-8u211-linux-x64.tar.gz</a>            |
| Mac OS X x64  | 252.23 MB | <a href="#">jdk-8u211-macosx-x64.dmg</a>              |
| Solaris SPARC 64-bit (SVR4 package)   | 132.98 MB | <a href="#">jdk-8u211-solaris-sparcv9.tar.Z</a>       |
| Solaris SPARC 64-bit  | 94.18 MB  | <a href="#">jdk-8u211-solaris-sparcv9.tar.gz</a>      |
| Solaris x64 (SVR4 package)  | 133.57 MB | <a href="#">jdk-8u211-solaris-x64.tar.Z</a>           |
| Solaris x64   | 91.93 MB  | <a href="#">jdk-8u211-solaris-x64.tar.gz</a>          |
| Windows x86   | 202.62 MB | <a href="#">jdk-8u211-windows-i586.exe</a>            |
| Windows x64   | 215.29 MB | <a href="#">jdk-8u211-windows-x64.exe</a>             |

Download the above *tar.gz* file to “/home/hirosht/Downloads”.

(You might have to login to the Oracle Account to download)

*Ps: If any other version of OracleJDK / OpenJDK is installed remove all firstly.*

### Steps:

1. Open the Terminal (*Ctrl + Alt + T*)

2. Create the *jvm* folder in *usr/lib*

```
$ sudo mkdir /usr/lib/jvm
```

3. Change the working directory

```
$ cd /usr/lib/jvm
```

4. Extract the downloaded *jdk-xuxxx-linux-x64.tar.gz* file in the *~/Downloads* folder using this command

```
$ sudo tar -xvzf ~/Downloads/jdk-8u211-linux-x64.tar.gz
```

5. Open the Environment Variable file using Nano-editor or Vi-editor

```
$ sudo nano /etc/environment or $ sudo vi /etc/environment
```

6. Add the following ‘bin-folder-path’ to the existing PATH variable in the opened file (ensure to separate the Path variable by a semicolon [:])

```
/usr/lib/jvm/jdk-11/bin
```

7. Add the following JAVA\_HOME environment variables at the end of the file.

```
JAVA_HOME="/usr/lib/jvm/jdk-11"
```

*The modified environment file must look like following.*

```
PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/lib/jvm/jdk1.8.0_211/bin"
JAVA_HOME="/usr/lib/jvm/jdk1.8.0_211"
```

## 8. Save the changes based on the editor opened

- 8.1 If Nano;
  - – – Ctrl + O and then Ctrl + X
- 8.2 If Vi;
  - – – Press Escape.
  - – – Then Shift + Semicolon (:).
  - – – Afterwards type (:wq!) and Press Enter

## 9. Set the Java Location

```
$ sudo update-alternatives --install "/usr/bin/java" "java"
"/usr/lib/jvm/jdk1.8.0_211/bin/java" 0

$ sudo update-alternatives --install "/usr/bin/javac" "javac"
"/usr/lib/jvm/jdk1.8.0_211/bin/javac" 0

$ sudo update-alternatives --set java
/usr/lib/jvm/jdk1.8.0_211/bin/java

$ sudo update-alternatives --set javac
/usr/lib/jvm/jdk1.8.0_211/bin/javac
```

## 10. Verify the setup by executing the following commands.

```
$ update-alternatives --list java
$ update-alternatives --list javac
```

## 11. Open the ~/.bashrc with vi-editor to append the following environment variables to the bottom.

```
$ sudo vi ~/.bashrc
```

and Press 'i' to move into insert in vi-editor. Add the following to the bottom of the doc.

```
JAVA_HOME="/usr/lib/jvm/jdk1.8.0_211"  
MAVEN_HOME="/usr/share/maven"  
PATH=$PATH:$HOME/bin:$JAVA_HOME/bin:$MAVEN_HOME/bin  
export JAVA_HOME  
export MAVEN_HOME  
export PATH
```

(Ps: I have set the MAVEN\_HOME path as well additionally. If its not required please remove those lines before pasting in '.bashrc').

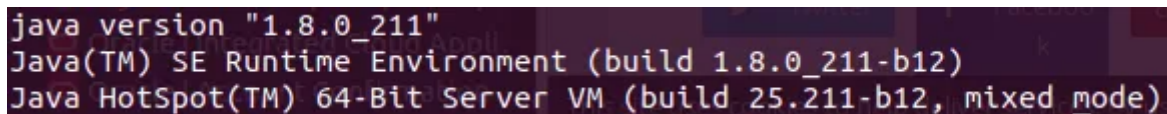
Save the amendment in the doc in vi-editor by following the steps below.

Press Escape.  
Then Shift + Semicolon (:).  
Afterwards type (:wq!)  
and Press Enter

## 12. Verify the Java Version (Restart, if required)

```
$ java -version
```

Should display as



```
java version "1.8.0_211"  
Java(TM) SE Runtime Environment (build 1.8.0_211-b12)  
Java HotSpot(TM) 64-Bit Server VM (build 25.211-b12, mixed mode)
```

## 13. Verify the JAVA\_HOME path.

```
$ echo $JAVA_HOME
```

the path should display as follows,

```
/usr/lib/jvm/jdk1.8.0_211
```

*Successfully installed and configured! Feel free to comment below if there is a better approach or if the flow can be improved.*

Programming

Ubuntu

Java8

Java



Follow



## Written by Hirosh Tharaka (BSc.Hons, CTFL)

217 Followers

Writer | Vlogger | Techie | Technical Tester (Snr-QAE)

---

More from Hirosh Tharaka (BSc.Hons, CTFL)