This tutorial helps you to install Java 8 or update Java on your system. Read the instruction carefully before downloading Java from Linux command line. To Install Java 8 in Ubuntu and LinuxMint read [This Article](https://tecadmin.net/install-oracle-java-8-jdk-8-ubuntu-via-ppa/).

**Step 1 – Download Latest Java Archive**

The Oracle team provides Java RPM packages as well as compiled source code. Many times I have tried Java installation using rpm packages but I faced some issues. So I decided to install Java using the compiled source code. Since then I have installed a large number of times Java on CentOS, Redhat based systems without any issues. To download the latest Java SE Development Kit 8 release from its [official download page](http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html) or use following commands to download from the shell.

cd /opt/

wget --no-cookies --no-check-certificate --header "Cookie: gpw\_e24=http%3A%2F%2Fwww.oracle.com%2F; oraclelicense=accept-securebackup-cookie" "http://download.oracle.com/otn-pub/java/jdk/8u171-b11/512cd62ec5174c3487ac17c61aaa89e8/jdk-8u171-linux-x64.tar.gz"

tar xzf jdk-8u171-linux-x64.tar.gz

**Step 2 – Install Java 8 with Alternatives**

The alternatives command is used for maintained symbolic links. This command used to creates, removes, maintains and displays information about the symbolic links comprising the alternatives system. Let’s use the alternatives command to configure Java on your system. The alternatives command is available in chkconfig package.

cd /opt/jdk1.8.0\_171/

alternatives --install /usr/bin/java java /opt/jdk1.8.0\_171/bin/java 2

alternatives --config java

There are 3 programs which provide 'java'.

Selection Command

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\* 1 /opt/jdk1.7.0\_71/bin/java

+ 2 /opt/jdk1.8.0\_45/bin/java

3 /opt/jdk1.8.0\_144/bin/java

4 /opt/jdk1.8.0\_171/bin/java

Enter to keep the current selection[+], or type selection number: 4

At this point JAVA 8 has been successfully installed on your system. We also recommend to setup javac and jar commands path using alternatives

alternatives --install /usr/bin/jar jar /opt/jdk1.8.0\_171/bin/jar 2

alternatives --install /usr/bin/javac javac /opt/jdk1.8.0\_171/bin/javac 2

alternatives --set jar /opt/jdk1.8.0\_171/bin/jar

alternatives --set javac /opt/jdk1.8.0\_171/bin/javac

**Step 3 – Check Installed Java Version**

Java and javac binaries are available under PATH environment variable. You can use them from anywhere in your system. Let’s check the installed version of Java runtime environment (JRE) on your system by executing the following command.

java -version

java version "1.8.0\_171"

Java(TM) SE Runtime Environment (build 1.8.0\_171-b11)

Java HotSpot(TM) 64-Bit Server VM (build 25.171-b11, mixed mode)

**Step 4 – Setup Java Environment Variables**

Most of Java based application’s uses environment variables to work. Set the Java environment variables using following commands

Set the JAVA\_HOME, JRE\_HOME and PATH environment variables.

export JAVA\_HOME=/opt/jdk1.8.0\_171

export JRE\_HOME=/opt/jdk1.8.0\_171/jre

export PATH=$PATH:/opt/jdk1.8.0\_171/bin:/opt/jdk1.8.0\_171/jre/bin

Also add the above commands to /etc/bashrc file to auto set environment variables on the system boot.

Copy these export commands in java.sh by creating new file in /etc/profile.d and the change the permissions to java.sh file

# Chmod 777 java.sh

Now we need to update this file using source command, it is because,when ever we add environment variables we need to update, else it wont work

# Source java.sh