

In this article, you'll learn the process to install Maven on Windows and Ubuntu.

- Install Maven on Windows
- Install Maven on Ubuntu

Install Maven on Windows

First, we need JDK ([Java](#) development kit) installed in our system, which is then followed by installing Maven on Windows.

Let's begin with opening the chrome browser and searching for "JDK 8 download." There will be a link to [Oracle](#).

Navigating to that page, you'll find the JDK for different platforms and operating systems.

Install the Windows x64 version.



Then, as the login page appears on the screen, log in to your account. As this is being done, you'll see that the .exe file is being downloaded.

While [Java is being installed](#), let's begin with the process to install Maven on Windows:

- Go back to your browser
- Search for "Maven download" or go straight to <https://maven.apache.org/download.cgi>
- Download using the Apache zip archive link

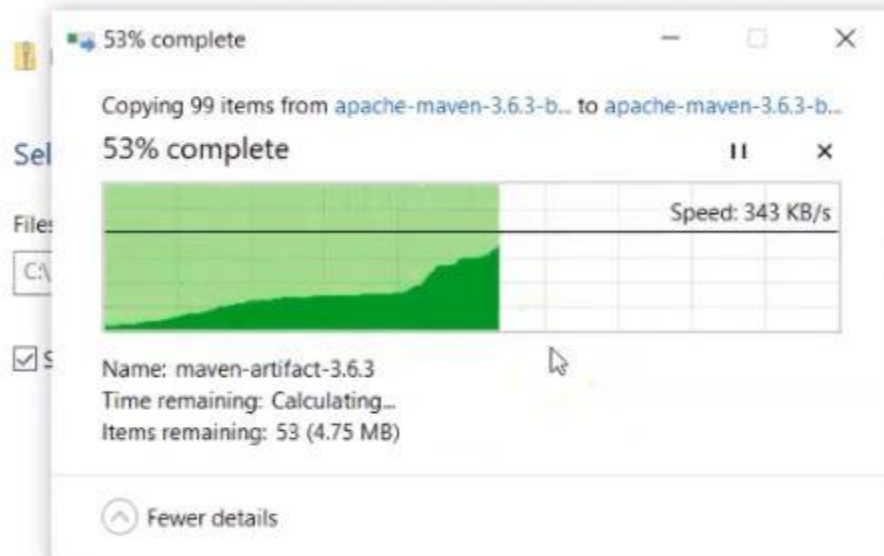
	Link
Binary tar.gz archive	apache-maven-3.6.3-bin.tar.gz
Binary zip archive	apache-maven-3.6.3-bin.zip
Source tar.gz archive	apache-maven-3.6.3-src.tar.gz
Source zip archive	apache-maven-3.6.3-src.zip

Once both JDK and Apache Maven are downloaded, we'll open the directory where the Java executables are.

Install the complete JDK.



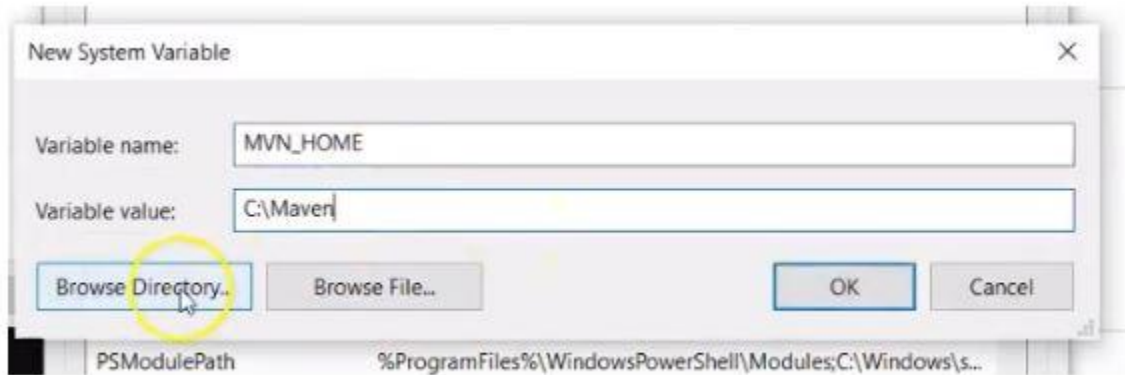
After installing the JDK, we need to go to the Maven directory and extract the files.



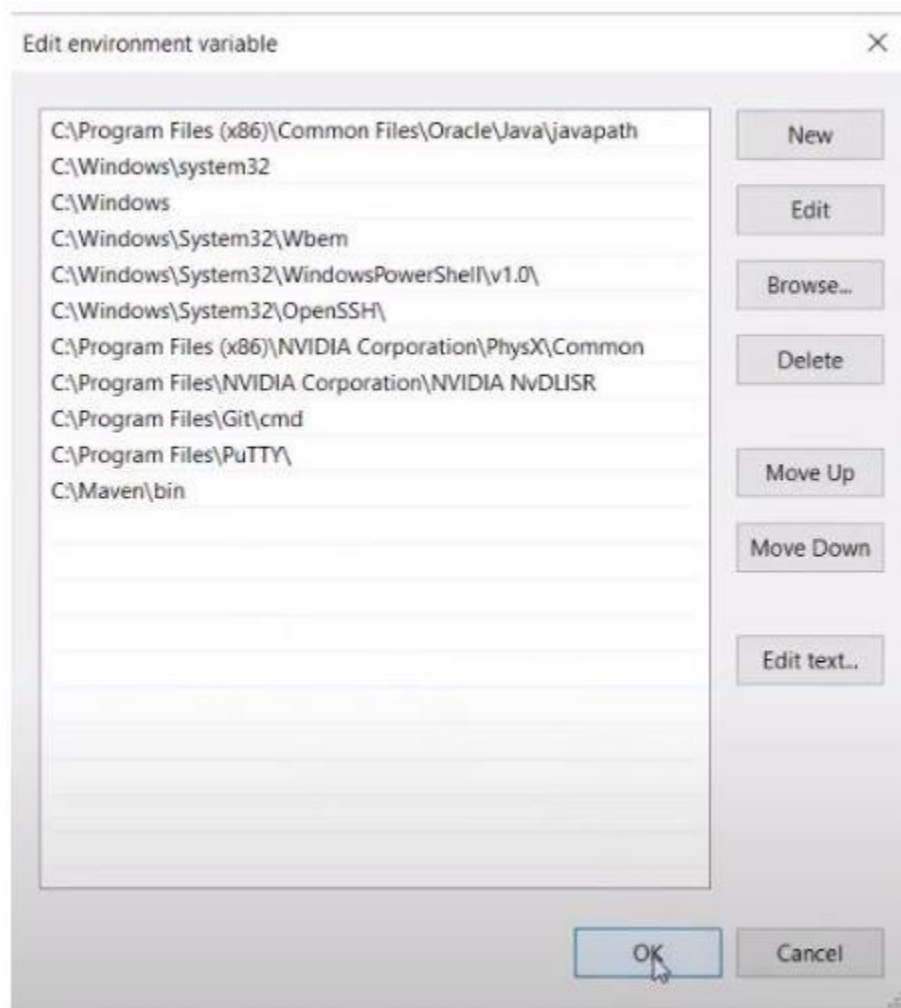
The file we get can be renamed and placed in the C drive, and that will be the Maven home path we'll use.

Then do the following:

- Go to the system properties
- In the system properties, go to the advanced system settings option
- In the dialog box that appears, go to the environment variables to set the path



Then, in the path variable, we have to add the bin directory.



Press OK on all the dialog boxes.

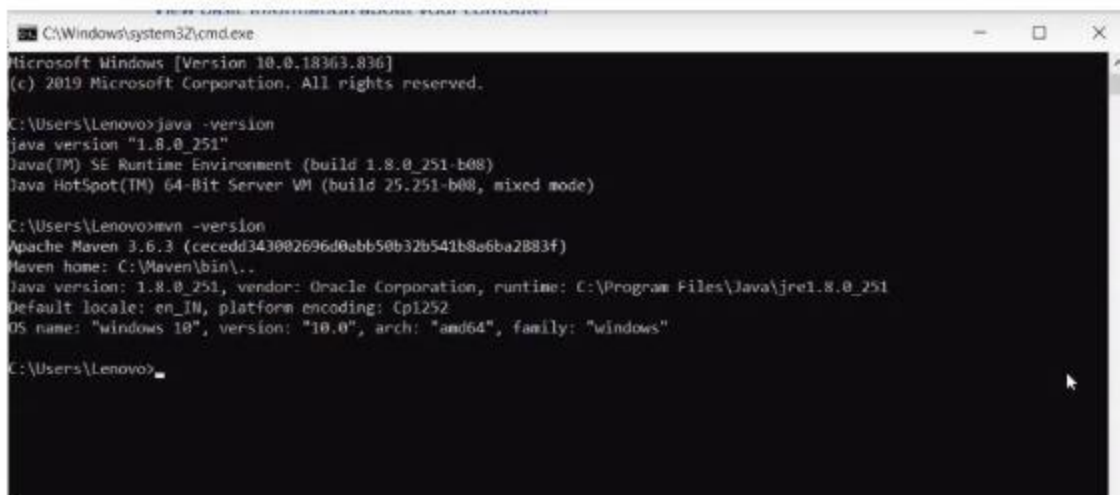
The Maven installation is done. To confirm that Maven is installed, go back to the command prompt window.

Check the Java version:

```
java -version
```

Followed by the Maven version:

```
mvn -version
```



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.18363.836]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Lenovo>java -version
java version "1.8.0_251"
Java(TM) SE Runtime Environment (build 1.8.0_251-b08)
Java HotSpot(TM) 64-Bit Server VM (build 25.251-b08, mixed mode)

C:\Users\Lenovo>mvn -version
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: C:\Maven\bin\..
Java version: 1.8.0_251, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jre1.8.0_251
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"

C:\Users\Lenovo>
```

Here, we can see both JDK and Maven installed on our system.

Install Maven on Ubuntu

In this process, we'll install both JDK and Maven on Ubuntu.

- Open the terminal

- Log in to the root id to install packages
- After the above process is done, run the app update command
- Next, install the latest package of Java

install oracle -java14 -installer

```
root@anujsharma401yo:~#
root@anujsharma401yo:~# apt install oracle-java14-installer
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  gsfonts gsfonts-x11 oracle-java14-set-default
Suggested packages:
  binfmt-support visualvm ttf-baekmuk | ttf-unfonts | ttf-unfonts-core ttf-kochi-gothic | ttf-sazanami-gothic ttf-kochi-mincho | ttf-sazanami-mincho
  ttf-orgrim-uming
The following NEW packages will be installed:
  gsfonts gsfonts-x11 oracle-java14-installer oracle-java14-set-default
0 upgraded, 4 newly installed, 0 to remove and 107 not upgraded.
Need to get 3,417 kB of archives.
After this operation, 3,115 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://azure.archive.ubuntu.com/ubuntu xenial/main amd64 gsfonts all 1:8.11+urwcyri.0.7-pre44-4.2ubuntu1 [3,374 kB]
Get:2 http://azure.archive.ubuntu.com/ubuntu xenial/universe amd64 gsfonts-x11 all 0.24 [7,314 B]
99% [waiting for headers]
```

While this happens, let's download Maven.

- Go back to your browser
- Search for “Maven download” or go straight to <https://maven.apache.org/download.cgi>
- Go to the Binary tar.gz archive
- Copy the link of the Binary tar.gz archive

	Link	Checksums	Signature
Binary tar.gz archive	apache-maven-3.6.3-bin.tgz	sha512	apache-maven-3.6.3-bin.tar.gz.asc
Binary zip archive	apache-maven-3.6.3-bin.zip	sha512	apache-maven-3.6.3-bin.zip.asc
Source tar.gz archive	apache-maven-3.6.3-src.tar.gz	sha512	apache-maven-3.6.3-src.tar.gz.asc
Source zip archive	apache-maven-3.6.3-src.zip	sha512	apache-maven-3.6.3-src.zip.asc

Let's go back to the terminal and check on the Java download.

After the installation is done, open a new terminal to install Maven.

In the new terminal, go to the opt directory

```
cd /opt
```

Then run the `wget` command along with the link copied above.

```
wget *link of tar.gz archive*
```

```
anujsharma401ya@anujsharma401ya:~$ sudo su -
root@anujsharma401ya:~# cd /opt/
root@anujsharma401ya:/opt# ls -l
total 164664
-rw-r--r-- 1 root root 3852 Sep 13 2016 rabbitmq-release_1.2-1-xenial_all.deb
drwxr-xr-x 3 root root 4096 Nov 26 2019 google
-rw-r--r-- 1 anujsharma401ya anujsharma401ya 189810998 Dec 6 2019 eclipse-jvm-eyegon-3e-linux-gtk-x86_64.tar.gz
drwxr-xr-x 8 root root 4096 Dec 6 2019 eclipse
-rw-r--r-- 1 root root 2862 Dec 7 2019 1
-rw-r--r-- 1 root root 286 Dec 7 2019 check_idletime.desktop
drwxr-xr-x 5 root root 4096 Dec 8 2019 .config
drwxr-xr-x 18 root root 4096 Dec 12 10:06 91532
-rwxr-xr-x 1 root root 649 Dec 24 07:38 check_idletime.py
-rw-r--r-- 1 root root 4155 Jan 3 10:02 linux_idletime.py
drwxr-xr-x 8 root root 4096 May 23 07:08 .
drwxr-xr-x 23 root root 4096 Jun 8 05:04 ..
root@anujsharma401ya:/opt# wget http://mirror.cc.columbia.edu/pub/software/apache/maven/maven-3/3.6.3/binaries/apache-maven-3.6.3-bin.tar.gz
--2020-06-08 05:24:28-- http://mirror.cc.columbia.edu/pub/software/apache/maven/maven-3/3.6.3/binaries/apache-maven-3.6.3-bin.tar.gz
Resolving mirror.cc.columbia.edu (mirror.cc.columbia.edu)... 128.59.59.71
Connecting to mirror.cc.columbia.edu (mirror.cc.columbia.edu)[128.59.59.71]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9506321 (9.1M) [application/x-gzip]
Saving to: 'apache-maven-3.6.3-bin.tar.gz'

apache-maven-3.6.3-bin.tar.gz 100%[=====] 9.07M 6.13MB/s in 1.5s
2020-06-08 05:24:29 (6.13 MB/s) - 'apache-maven-3.6.3-bin.tar.gz' saved [9506321/9506321]
root@anujsharma401ya:/opt#
```

When the Maven tar file is downloaded, extract that file.

```
tar -xvzf *tar file name*
```

```
root@anujsharma401ya:/opt# tar -xvzf apache-maven-3.6.3-bin.tar.gz
```

After the extraction has finished, we can see the Apache Maven directory.

Now, rename the directory. To rename it, use the move command to go to the actual folder.


```
mv *apache-maven folder*
```

Now let's go to the Maven directory.

```
cd maven/
```

```
apache-maven-3.6.3/lib/jcl-over-slf4j-1.7.29.jar
apache-maven-3.6.3/lib/wagon-file-3.3.4.jar
apache-maven-3.6.3/lib/maven-resolver-connector-basic-1.4.1.jar
apache-maven-3.6.3/lib/maven-resolver-transport-wagon-1.4.1.jar
apache-maven-3.6.3/lib/maven-slf4j-provider-3.6.3.jar
root@anujsharma401ya:/opt# ls -alrt
total 193852
-rw-r--r-- 1 root root 3852 Sep 13 2016 xahbis-release-3.2-1-xmml_all.deb
-rw-r--r-- 1 root root 9506321 Nov 19 2019 apache-maven-3.6.2-bin.tar.gz
drwxr-xr-x 3 root root 4096 Nov 26 2019 google
-rw-rw-r-- 1 anujsharma401ya anujsharma401ya 109039090 Dec 6 2019 eclipse-java-oxygen-3e-linux-gtk-x86_64.tar.gz
drwxrwxr-x 8 root root 4096 Dec 6 2019 eclipse
-rw-r--r-- 1 root root 2662 Dec 7 2019 l
-rw-r--r-- 1 root root 206 Dec 7 2019 check_idletime.desktop
drwxr-xr-x 5 root root 4096 Dec 8 2019 .config
drwxr-xr-x 10 root root 4096 Dec 12 10:06 91532
-rwxr-xr-x 1 root root 449 Dec 24 07:38 check_idletime.py
-rw-r--r-- 1 root root 4153 Jan 3 10:02 linux_idletime.py
drwxr-xr-x 23 root root 4096 Jun 8 05:04 ..
drwxr-xr-x 7 root root 4096 Jun 8 05:24 ..
drwxr-xr-x 8 root root 4096 Jun 8 05:24 apache-maven-3.6.3
root@anujsharma401ya:/opt# mv apache-maven-3.6.3 maven
root@anujsharma401ya:/opt# cd maven/
root@anujsharma401ya:/opt/maven# ls -alrt
total 56
-rw-r--r-- 1 root root 2612 Nov 7 2019 README.txt
-rw-r--r-- 1 root root 5141 Nov 7 2019 NOTICE
-rw-r--r-- 1 root root 17504 Nov 7 2019 LICENSE
drwxr-xr-x 3 root root 4096 Nov 7 2019 conf
drwxr-xr-x 2 root root 4096 Jun 8 05:24 bin
drwxr-xr-x 8 root root 4096 Jun 8 05:24 ..
drwxr-xr-x 2 root root 4096 Jun 8 05:24 root
drwxr-xr-x 4 root root 4096 Jun 8 05:24 lib
drwxr-xr-x 7 root root 4096 Jun 8 05:25 ..
root@anujsharma401ya:/opt/maven# pwd
/opt/maven
```

Now go back to terminal 1 and check the Java version.

```
java -version
```

```
Terminal
File Edit View Search Terminal Help

WARNING: It is highly recommended that you run Cloudera Express in a VM with
at least 8 GB of RAM.

You can override these checks by passing in the --force option,
e.g:

    sudo /home/cloudera/cloudera-manager --force

Press [Enter] to exit...
```

Coming back to terminal 2:

```
cd /etc/profile.d/
```

```
root@anujsharma401ya:/opt/maven#
root@anujsharma401ya:/opt/maven# cd /etc/profile.d/
root@anujsharma401ya:/etc/profile.d# ls -alrt
total 52
-rw-r--r-- 1 root root 1803 Dec 29 2015 cedilla-portuguese.sh
-rw-r--r-- 1 root root 1557 Apr 14 2016 Z97-byobu.sh
-rw-r--r-- 1 root root 185 Apr 29 2016 gtk-accessibility.sh
-rw-r--r-- 1 root root 663 May 18 2016 bash_completion.sh
-rw-r--r-- 1 root root 825 Aug 20 2019 apps-bin-path.sh
-rwxr-xr-x 1 root root 3417 Oct 4 2019 Z99-cloud-locale-test.sh
-rwxr-xr-x 1 root root 873 Oct 4 2019 Z99-cloudfinit-warnings.sh
-rwxr-xr-x 1 root root 268 Mar 18 09:25 jdk.csh
-rwxr-xr-x 1 root root 266 Mar 18 09:25 jdk.sh
drwxr-xr-x 130 root root 12288 Jun 8 05:24 ..
drwxr-xr-x 2 root root 4096 Jun 8 05:24 .
root@anujsharma401ya:/etc/profile.d# cat jdk.sh
export J2SDKDIR=/usr/lib/jvm/java-14-oracle
export J2REDIR=/usr/lib/jvm/java-14-oracle
export PATH=$PATH:/usr/lib/jvm/java-14-oracle/bin:/usr/lib/jvm/java-14-oracle/db/bin
export JAVA_HOME=/usr/lib/jvm/java-14-oracle
export DERBY_HOME=/usr/lib/jvm/java-14-oracle/db
root@anujsharma401ya:/etc/profile.d#
```

We can see all the path variables here.

To add some more parameters, use the echo command so the path variables can be copied:

```
echo *path copied* /opt/maven/bin >>maven.sh
```

```
export J2REDIR=/usr/lib/jvm/java-14-oracle
export PATH=$PATH:/usr/lib/jvm/java-14-oracle/bin:/usr/lib/jvm/java-14-oracle/db/bin
export JAVA_HOME=/usr/lib/jvm/java-14-oracle
export DERBY_HOME=/usr/lib/jvm/java-14-oracle/db
root@anujsharma401ya:/etc/profile.d# echo "export PATH=$PATH:"
```

Now, export MVN_HOME here.

```
echo "export MVN_HOME=/opt/maven" >>maven.sh
```

```
root@anujsharma401ya:/etc/profile.d# echo "export PATH=$PATH:/opt/maven/bin/" >> maven.sh
root@anujsharma401ya:/etc/profile.d# echo "export MVN_HOME=/opt/maven" >> maven.sh
root@anujsharma401ya:/etc/profile.d# cat maven.sh
export PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/opt/maven/bin/
export MVN_HOME=/opt/maven
root@anujsharma401ya:/etc/profile.d#
```

In the end, we'll give executable permissions to this file.

```
chmod +x maven.sh
```

The last step is to run the source command:

```
source /etc/profile.d/maven.sh
```

After this command, we can run the Maven version command:

mvn -version

A terminal window titled "Terminal - root@anujsharma401ya: ~" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The terminal shows the following commands and output:

```
root@anujsharma401ya:~# source /etc/profile.d/maven.sh
root@anujsharma401ya:~# mvn -version
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: /opt/maven
Java version: 1.8.0_252, vendor: Private Build, runtime: /usr/lib/jvm/java-8-openjdk-amd64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "4.15.0-1083-azure", arch: "amd64", family: "unix"
root@anujsharma401ya:~#
```

Here, we can check the version of Maven, and this is how we can configure Maven on our Ubuntu virtual machine.