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.
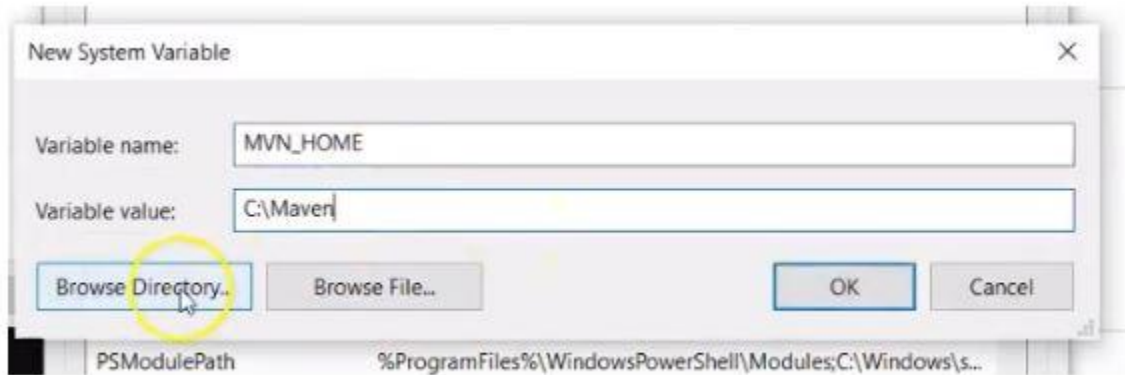
Install the complete JDK.



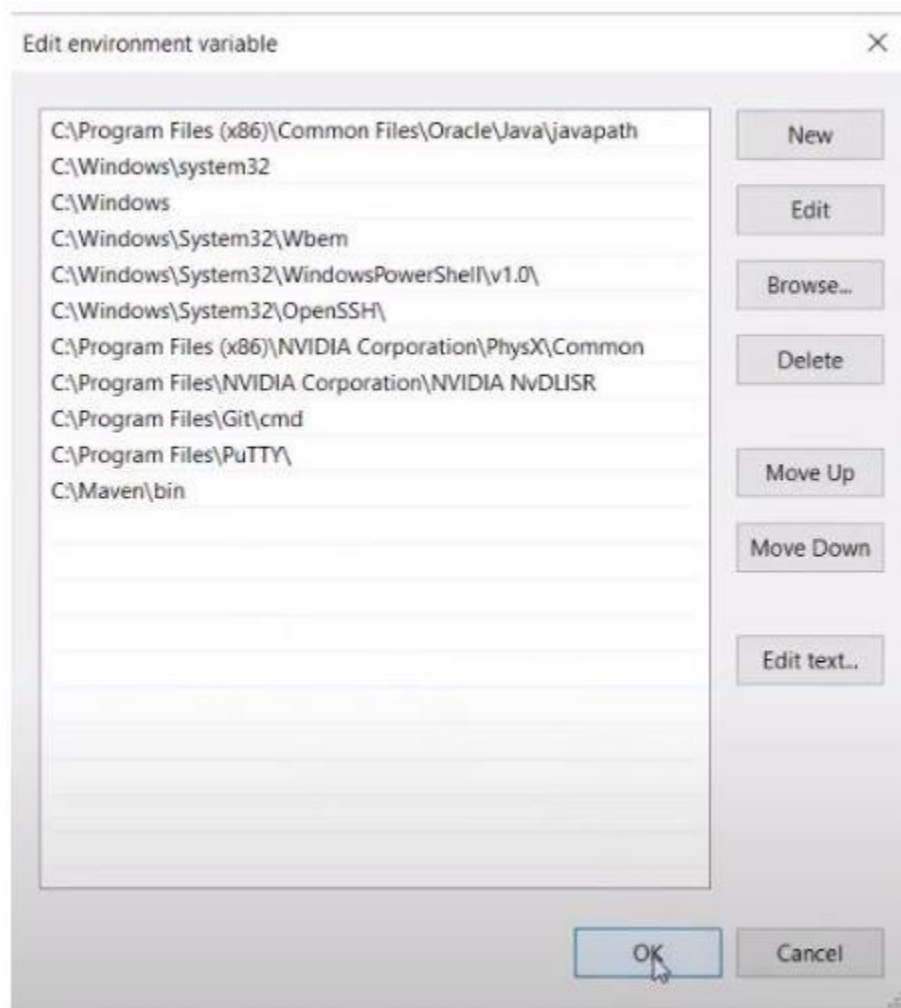After installing the JDK, we need to go to the Maven directory and extract the files.
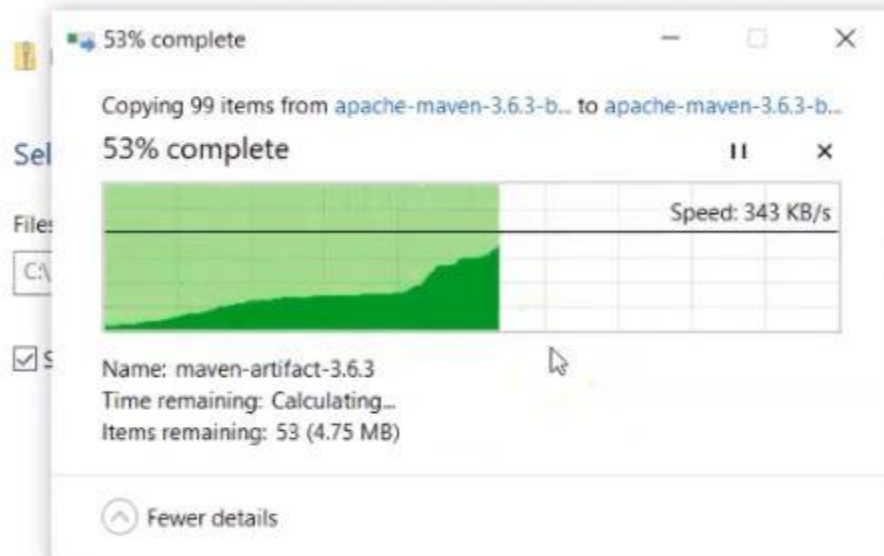
The file we get can be renamed and placed in the C drive, and that will be the Maven home path we'll use.

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

The next step is to open the CMD prompt.

In the command prompt, type the command to check the Java version:

```
java -version
```

The version of Java appears on the screen.

Then come back to the dialog box and click on new, to set up a new environment variable.

In the name, enter MVN_HOME. In the variable value, paste the Maven directory location in the C drive.

## New System Variable

| | |
|---|---|
| Variable name: | MVN_HOME |
| Variable value: | C:\Maven |

Browse Directory..    Browse File..    OK    Cancel

PSModulePath    %ProgramFiles%\WindowsPowerShell\Modules;C:\Windows\s...

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

## Edit environment variable

C:\Program Files (x86)\Common Files\Oracle\Java\javapath
C:\Windows\system32
C:\Windows
C:\Windows\System32\Wbem
C:\Windows\System32\WindowsPowerShell\v1.0\
C:\Windows\System32\OpenSSH\
C:\Program Files (x86)\NVIDIA Corporation\PhysX\Common
C:\Program Files\NVIDIA Corporation\NVIDIA NvDLISR
C:\Program Files\Git\cmd
C:\Program Files\PuTTY\
C:\Maven\bin

New    Edit    Browse...    Delete    Move Up    Move Down    Edit text...

OK    Cancel

Press OK on all the dialog boxes.
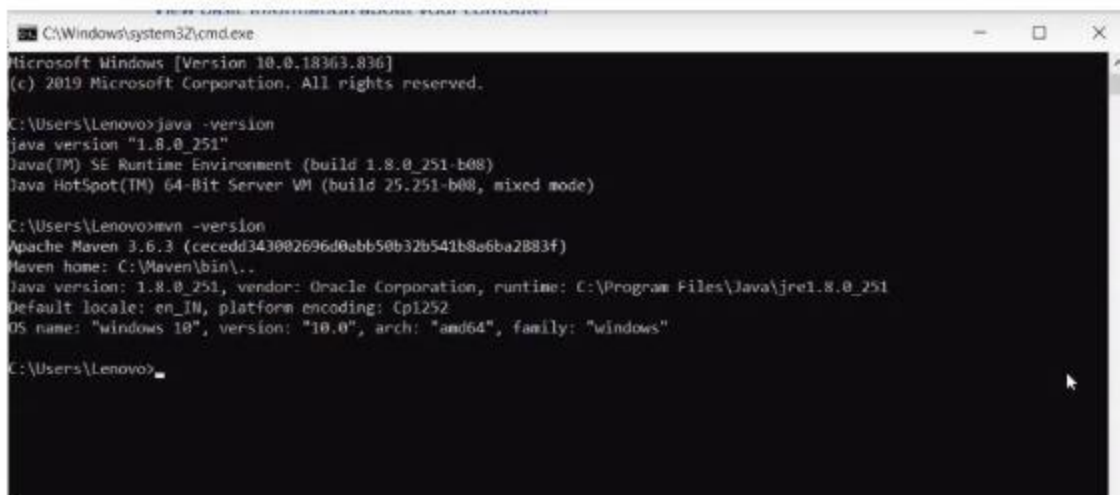
The Maven installation is done. To confirm that Maven is installed, go back to the command prompt window.

Check the Java version:

```
java -version
```

Followed by the Maven version:

```
mvn -version
```



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@anujsharma401ya:-#
root@anujsharma401ya:-# 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-arphic-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, 5,115 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+urwcyr1.0.7-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]
90% [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



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*
```



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

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



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/
```



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.         I


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  1003 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-cloudinit-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



```
                                                      Terminal - root@anujsharma401ya: ~
File  Edit  View  Terminal  Tabs  Help
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.