

# Install Maven

## 1 -Ubuntu

Installing Maven on Ubuntu using apt is a simple, straightforward process.

Update the package index and install Maven by entering the following commands:

```
sudo apt updatesudo apt install maven
```

To verify the installation, run `mvn -version`:

```
mvn -version
```

The output should look something like this:

```
Apache Maven 3.6.3
Maven home: /usr/share/maven
Java version: 11.0.7, vendor: Ubuntu, runtime: /usr/lib/jvm/java-11-
openjdk-amd64
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "5.4.0-26-generic", arch: "amd64", family:
"unix"
```

That's it. Maven is now installed on your system, and you can start using it.

## Installing the Latest Release of Apache Maven

In this section, we'll provide a step by step instructions about how to download and install the latest Apache Maven version on Ubuntu 20.04.

### 1. Install OpenJDK

Maven 3.3+ requires JDK 1.7 or above to be installed.

[Install OpenJDK 11](#) , by typing:

```
sudo apt updatesudo apt install default-jdk
```

Verify the installation by running the following command:

```
java -version
```

The output should look something like this:

```
openjdk version "11.0.7" 2020-04-14
OpenJDK Runtime Environment (build 11.0.7+10-post-Ubuntu-3ubuntu1)
OpenJDK 64-Bit Server VM (build 11.0.7+10-post-Ubuntu-3ubuntu1, mixed
mode, sharing)
```

## 2. Downloading Apache Maven

At the time of writing this article, the latest version of Apache Maven is 3.6.3. Before continuing with the next step, visit the [Maven download page](#) to see if a newer version is available.

Download the Apache Maven in the `/tmp` directory:

```
wget https://www-us.apache.org/dist/maven/maven-3/3.6.3/binaries/apache-
maven-3.6.3-bin.tar.gz -P /tmp
```

Once the download is completed, [extract the archive](#) in the `/opt` directory:

```
sudo tar xf /tmp/apache-maven-*.tar.gz -C /opt
```

To have more control over Maven versions and updates, we will [create a symbolic link](#) `maven` that will point to the Maven installation directory:

```
sudo ln -s /opt/apache-maven-3.6.3 /opt/maven
```

When a new version is released, you can upgrade your Maven installation, by unpacking the newer version and change the [symlink](#) to point to it.

## 3. Setup environment variables

Next, we'll need to set up the environment variables. To do so, open your [text editor](#) and create a new file named `maven.sh` in the `/etc/profile.d/` directory.

```
sudo nano /etc/profile.d/maven.sh
```

Paste the following code:

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

```
export JAVA_HOME=/usr/lib/jvm/default-java
export M2_HOME=/opt/maven
export MAVEN_HOME=/opt/maven
export PATH=${M2_HOME}/bin:${PATH}
```

Save and close the file. This script will be sourced at shell startup.

Make the script executable with `chmod` :

```
sudo chmod +x /etc/profile.d/maven.sh
```

Finally, load the environment variables using the `source` command:

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

#### 4. Verify the installation

To verify that Maven is installed, use the `mvn -version` command which will print the Maven version:

```
mvn -version
```

You should see something like the following:

```
Maven home: /opt/maven
Java version: 11.0.7, vendor: Ubuntu, runtime: /usr/lib/jvm/java-11-
openjdk-amd64
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "5.4.0-26-generic", arch: "amd64", family:
"unix"
```

That's it. The latest version of Maven is now installed on your Ubuntu system.

#### Conclusion

We have shown you how to install Apache Maven on Ubuntu 20.04. You should now visit the official [Apache Maven Documentation](#) page and learn how to get started with Maven.

If you hit a problem or have feedback, leave a comment below.

## 2- CentOS

#### Prerequisites #

The user you are logging in as must have [sudo privileges](#) to be able to install packages.

#### Installing Apache Maven on CentOS with Yum

Installing Maven on CentOS 7 using `yum` is a simple, straightforward process.

1. Install Maven by typing the following command in your terminal:

```
sudo yum install maven
```

Verify the installation by typing the `mvn -version` command:

```
mvn -version
```

The output should look something like this:

```
Apache Maven 3.0.5 (Red Hat 3.0.5-17)
Maven home: /usr/share/maven
Java version: 1.8.0_191, vendor: Oracle Corporation
Java home: /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.191.b12-0.el7_5.x86_64
/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "3.10.0-862.3.2.el7.x86_64", arch: "amd64",
family: "unix"
```

That's it. Maven is now installed on your CentOS system and you can start using it.

## Install the Latest Release of Apache Maven

The following sections provide a step by step instructions about how to install the latest Apache Maven version on CentOS 7. We'll be downloading the latest release of Apache Maven from their official website.

### 1. Install OpenJDK

Maven 3.3+ requires JDK 1.7 or above to be installed. We'll [install OpenJDK](#) , which is the default Java development and runtime in CentOS 7.

Install the OpenJDK package by typing:

```
sudo yum install java-1.8.0-openjdk
```

Verify that Java was successfully installed by running the following command:

```
java -version
```

The output should look something like this:

```
openjdk version "1.8.0_191"
OpenJDK Runtime Environment (build 1.8.0_191-b12)
OpenJDK 64-Bit Server VM (build 25.191-b12, mixed mode)
```

## 2. Download Apache Maven

At the time of writing this article, the latest version of Apache Maven is 3.6.0. Before continuing with the next step, you should check the [Maven download page](#) to see if a newer version is available.

Start by downloading the Apache Maven in the `/tmp` directory using the following `wget` command:

```
wget https://www-us.apache.org/dist/maven/maven-3/3.6.0/binaries/apache-maven-3.6.0-bin.tar.gz -P /tmp
```

When the download is completed, [extract the archive](#) in the `/opt` directory:

```
sudo tar xf /tmp/apache-maven-3.6.0-bin.tar.gz -C /opt
```

To have more control over Maven versions and updates, we will [create a symbolic link](#) `maven` that will point to the Maven installation directory:

```
sudo ln -s /opt/apache-maven-3.6.0 /opt/maven
```

To upgrade your Maven installation, simply unpack the newer version and change the symlink to point to it.

## 3. Setup environment variables

Next, we'll need to set up the environment variables. Open your text editor and create a new file named `maven.sh` inside of the `/etc/profile.d/` directory.

```
sudo nano /etc/profile.d/maven.sh
```

Paste the following lines:

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

```
export JAVA_HOME=/usr/lib/jvm/jre-openjdk
export M2_HOME=/opt/maven
export MAVEN_HOME=/opt/maven
export PATH=${M2_HOME}/bin:${PATH}
```

Save and close the file. This script will be sourced at shell startup.

Make the script executable by running the following `chmod` command:

```
sudo chmod +x /etc/profile.d/maven.sh
```

Load the environment variables using the `source` command:

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

#### 4. Verify the installation

To verify that Maven is installed, use the `mvn -version` command which will print the Maven version:

```
mvn -version
```

You should see something like the following:

```
Apache Maven 3.6.0 (97c98ec64a1fdfee7767ce5fffb20918da4f719f3; 2018-10-24T18:41:47Z)
Maven home: /opt/maven
Java version: 1.8.0_191, vendor: Oracle Corporation, runtime: /usr/lib
/jvm/java-1.8.0-openjdk-1.8.0.191.b12-0.el7_5.x86_64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "3.10.0-862.3.2.el7.x86_64", arch: "amd64",
family: "unix"
```

That's it. The latest version of Maven is now installed on your CentOS system.

#### Conclusion

You have successfully installed Apache Maven on your CentOS 7. You can now visit the official [Apache Maven Documentation](#) page and learn how to get started with Maven.

If you hit a problem or have feedback, leave a comment below.