How to install Maven in Centos 7

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In this session, we are going to discuss how to install maven in Centos 7.

Prerequisites:

Your user must have sudo privileges to be able to install the packages.

Step 1: Install OpenJDK 8 in CentOS 7

```
[root@ip-172-31-89-37 ~]# sudo yum install java-1.8.0-devel -y
```

Output:

```
[root@ip-172-31-89-37 ~]# yum install  java-1.8.0-openjdk-devel -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                                                               | 3.7 kB  00:00:00
Resolving Dependencies
--> Running transaction check
---> Package java-1.8.0-openjdk-devel.x86_64 1:1.8.0.332.b09-1.amzn2.0.2 will be installed
--> Processing Dependency: java-1.8.0-openjdk(x86-64) = 1:1.8.0.332.b09-1.amzn2.0.2 for package: 1:java-1.8.0-openjdk
-devel-1.8.0.332.b09-1.amzn2.0.2.x86_64
--> Processing Dependency: libjvm.so()(64bit) for package: 1:java-1.8.0-openjdk-devel-1.8.0.332.b09-1.amzn2.0.2.x86_6
4
--> Processing Dependency: libjava.so()(64bit) for package: 1:java-1.8.0-openjdk-devel-1.8.0.332.b09-1.amzn2.0.2.x86_
64
--> Processing Dependency: libX11.so.6()(64bit) for package: 1:java-1.8.0-openjdk-devel-1.8.0.332.b09-1.amzn2.0.2.x86
_64
--> Running transaction check
---> Package java-1.8.0-openjdk.x86_64 1:1.8.0.332.b09-1.amzn2.0.2 will be installed
```

Step 1.1: Check whether java is installed or not using the below command.

```
[root@ip-172-31-89-37 ~]# sudo java -version
```

Output:

```
[root@ip-172-31-89-37 ~]# java -version
openjdk version "1.8.0_332"
OpenJDK Runtime Environment (build 1.8.0_332-b09)
OpenJDK 64-Bit Server VM (build 25.332-b09, mixed mode)
[root@ip-172-31-89-37 ~]#
```

Step 2: Install Apache Maven in CentOS 7

Step 2.1: Now Go to the official Apache Maven download page and take the latest version or take a specific version. And then use the wget command to download it under the maven home directory **"/opt"**

```
[root@ip-172-31-89-37 ~]# cd /opt/
[root@ip-172-31-89-37 opt]# pwd
/opt
[root@ip-172-31-89-37 opt]# wget https://dlcdn.apache.org/maven/maven-3/3.8.6/binaries/apache-maven-3.8.6-bin.tar.gz
```

Output:

```
[root@ip-172-31-89-37 opt]# pwd
/opt
[root@ip-172-31-89-37 opt]# wget https://dlcdn.apache.org/maven/maven-3/3.8.6/binaries/apache-maven-3.8.6-bin.tar.gz
--2022-08-27 09:10:52--  https://dlcdn.apache.org/maven/maven-3/3.8.6/binaries/apache-maven-3.8.6-bin.tar.gz
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 8676320 (8.3M) [application/x-gzip]
Saving to: 'apache-maven-3.8.6-bin.tar.gz'

100%[=====================================================================>] 8,676,320   --.-K/s   in 0.04s

2022-08-27 09:10:52 (219 MB/s) - 'apache-maven-3.8.6-bin.tar.gz' saved [8676320/8676320]

[root@ip-172-31-89-37 opt]#
```

Step 2.2: Extract the downloaded archive file using following commands.

```
[root@ip-172-31-89-37 opt]# sudo tar -xvf apache-maven-3.8.6-bin.tar.gz
```

Output:

```
[root@ip-172-31-89-37 opt]# pwd
/opt
[root@ip-172-31-89-37 opt]# ls
apache-maven-3.8.6-bin.tar.gz  aws  rh
[root@ip-172-31-89-37 opt]# tar -xvf apache-maven-3.8.6-bin.tar.gz
apache-maven-3.8.6/README.txt
apache-maven-3.8.6/LICENSE
apache-maven-3.8.6/NOTICE
apache-maven-3.8.6/lib/
apache-maven-3.8.6/lib/commons-cli.license
apache-maven-3.8.6/lib/commons-io.license
apache-maven-3.8.6/lib/commons-lang3.license
apache-maven-3.8.6/lib/guava.license
apache-maven-3.8.6/lib/guice.license
apache-maven-3.8.6/lib/jansi.license
apache-maven-3.8.6/lib/javax.annotation-api.license
apache-maven-3.8.6/lib/javax.inject.license
apache-maven-3.8.6/lib/jcl-over-slf4j.license
apache-maven-3.8.6/lib/org.eclipse.sisu.inject.license
apache-maven-3.8.6/lib/org.eclipse.sisu.plexus.license
```


Step 2.3: Now rename the maven folder using below command

```
[root@ip-172-31-89-37 opt]# sudo mv apache-maven-3.8.6 maven
```

Output:

```
[root@ip-172-31-89-37 opt]# ll
total 8476
drwxr-xr-x 6 root root      99 Aug 27 09:12 apache-maven-3.8.6
-rw-r--r-- 1 root root 8676320 Jun  6 16:45 apache-maven-3.8.6-bin.tar.gz
drwxr-xr-x 4 root root      33 Aug 15 20:22 aws
drwxr-xr-x 2 root root       6 Aug 16  2018 rh
[root@ip-172-31-89-37 opt]# mv apache-maven-3.8.6 maven
[root@ip-172-31-89-37 opt]# ll
total 8476
-rw-r--r-- 1 root root 8676320 Jun  6 16:45 apache-maven-3.8.6-bin.tar.gz
drwxr-xr-x 4 root root      33 Aug 15 20:22 aws
drwxr-xr-x 6 root root      99 Aug 27 09:12 maven
drwxr-xr-x 2 root root       6 Aug 16  2018 rh
[root@ip-172-31-89-37 opt]#
```

Step 2.4: Now configure the Apache Maven Environment

For pre-compiled Apache Maven files on our system, we have to configure the apache maven environments variables. So create the **"maven.sh"** in the **"/etc/profile.d"** directory.

```
[root@ip-172-31-89-37 opt]# cd /etc/profile.d/
[root@ip-172-31-89-37 profile.d]# pwd
/etc/profile.d
[root@ip-172-31-89-37 profile.d]# sudo vim maven.sh
```

Add the below configuration inside the **"maven.sh"** configuration file.

```
# Apache Maven Environment Variables
# MAVEN_HOME for Maven 1 - M2_HOME for Maven 2
export M2_HOME=/opt/maven
export PATH=${M2_HOME}/bin:${PATH}
```

Output:

```
[root@ip-172-31-89-37 opt]# cd /etc/profile.d/
[root@ip-172-31-89-37 profile.d]# pwd
/etc/profile.d
[root@ip-172-31-89-37 profile.d]# cat maven.sh
# Apache Maven Environment Variables
# MAVEN_HOME for Maven 1 - M2_HOME for Maven 2
export M2_HOME=/opt/maven
export PATH=${M2_HOME}/bin:${PATH}
[root@ip-172-31-89-37 profile.d]#
```

Step 2.5: Provide the execute permissions for **maven.sh** configuration using below command

```
[root@ip-172-31-89-37 profile.d]# sudo chmod 777 maven.sh
```

Output:

```
[root@ip-172-31-89-37 profile.d]# chmod 777 maven.sh
[root@ip-172-31-89-37 profile.d]# ll
total 64
-rw-r--r-- 1 root root  771 Jun 29 17:57 256term.csh
-rw-r--r-- 1 root root  841 Jun 29 17:57 256term.sh
-rw-r--r-- 1 root root  660 Oct 18  2017 bash_completion.sh
-rw-r--r-- 1 root root  196 Jul 31  2018 colorgrep.csh
-rw-r--r-- 1 root root  201 Jul 31  2018 colorgrep.sh
-rw-r--r-- 1 root root 1741 Jan 23  2020 colorls.csh
-rw-r--r-- 1 root root 1606 Jan 23  2020 colorls.sh
-rw-r--r-- 1 root root   80 Feb 21  2020 csh.local
-rw-r--r-- 1 root root 1706 Jun 29 17:57 lang.csh
-rw-r--r-- 1 root root 2703 Jun 29 17:57 lang.sh
-rw-r--r-- 1 root root  123 Jul 31  2018 less.csh
-rw-r--r-- 1 root root  121 Jul 31  2018 less.sh
-rwxrwxrwx 1 root root  139 Aug 27 09:01 maven.sh
-rw-r--r-- 1 root root   81 Feb 21  2020 sh.local
-rw-r--r-- 1 root root  164 Aug  1  2018 which2.csh
-rw-r--r-- 1 root root  169 Aug  1  2018 which2.sh
[root@ip-172-31-89-37 profile.d]#
```

Step 2.6: Using source command to load the configuration in your system using below command

```
[root@ip-172-31-89-37 profile.d]# sudo source maven.sh
                    (or)
[root@ip-172-31-89-37 ~]# sudo source /etc/profile.d/maven.sh
```

Step 2.7: Now check whether maven is installed or not using below command

```
[root@ip-172-31-89-37 ~]#sudo  mvn --version
```

Output:

```
[root@ip-172-31-89-37 ~]# mvn --version
Apache Maven 3.8.6 (84538c9988a25aec085021c365c560670ad80f63)
Maven home: /opt/maven
Java version: 1.8.0_332, vendor: Red Hat, Inc., runtime: /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.332.b09-1.amzn2.0.2.x8
6_64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "5.10.130-118.517.amzn2.x86_64", arch: "amd64", family: "unix"
[root@ip-172-31-89-37 ~]#
[root@ip-172-31-89-37 ~]#
```

Conclusion:

Congratulations. You have successfully installed Apache Maven 3.8.6 version on your CentOS 7. If you are facing any issues during the installation, please do share with us in the comment section.

**** Thank you for watching this Video. We will see you in the next video. ****

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About the Author:

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- I am having rich experience in Devops and Cloud technologies and have done many projects on all varieties of tools which are hot cake in the market.
- I am passionate about learning new technology and teaching.
- My courses focus on providing students with an interactive and hands-on experience in learning new technology that makes learning really interesting.
- I have a wide range of experience in Telecom, Banking, Healthcare, Retail domains.
- I have been training people in newer technologies, like DevOps, AWS, Kubernetes, Terraform,Rancher, etc. and they have settled in MNC's and drawing respectable salaries.
- I have undergone many challenges and changed the entire phase of the projects.
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Please check out my courses and join me with thousands of others who are learning the latest DevOps and Cloud tools!

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