



# INSTALLING AND SETTING UP ONEPOINT PROJECTS WITH JAVA, TOMCAT AND POSTGRESQL ON LINUX

## INSTALLING ORACLE JAVA

1. Download the Linux Version of Oracle Java from

NOTE: Please make sure to download the JDK and not the JRE version!

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

2. Extract the files from the downloaded archive

```
tar -xvf jdk-8u101-linux-x64.tar.gz
```

3. Create a directory for JDK and move the extracted files there

```
sudo mkdir -p /usr/lib/jdk8
```

```
sudo mv ./jdk1.8.0_101 /usr/lib/jdk8/
```

4. Adjust the permissions on the files to correctly run Java

```
sudo chown -R root:root /usr/lib/jdk8/jdk1.8.0_101/
```

```
sudo chmod a+x /usr/lib/jdk8/jdk1.8.0_101/bin/java
```

```
sudo chmod a+x /usr/lib/jdk8/jdk1.8.0_101/bin/javac
```

## INSTALLING TOMCAT

5. Get the latest Tomcat 8 version from <http://tomcat.apache.org/download-80.cgi>

Download the “.tar.gz”-distribution.

6. Extract the files of Tomcat

```
tar xvf apache-tomcat-8.5.5.tar.gz
```

7. Create a user and group “tomcat”

```
sudo groupadd tomcat
```

```
sudo useradd -g tomcat -s /usr/sbin/nologin -m tomcat
```

8. Set Tomcat group and user as the owner of the Tomcat folder

```
sudo chown -R tomcat:tomcat apache-tomcat-8.5.5/
```

9. Create a “setenv.sh”-file

```
sudo nano ./apache-tomcat-8.5.5/bin/setenv.sh
```

10. Add the following entries to the “setenv.sh”-file

```
#!/bin/sh  
  
#  
export JAVA_HOME='/usr/lib/jdk8/jdk1.8.0_101/'  
export JAVA_OPTS='-Djava.awt.headless=true -Xms1024m  
-Xmx1024m -XX:PermSize=256m -XX:MaxPermSize=256m'
```

11. Move the Tomcat folder to an alternative directory

```
sudo mv apache-tomcat-8.5.5/ /usr/local/tomcat
```

12. Verify the functionality of the Tomcat instance, using the Tomcat user, to run:

```
sudo su - -s /bin/sh tomcat  
  
cd /usr/local/tomcat/bin  
  
./Catalina.sh run
```

13. Test the connection by connecting to “http://localhost:8080” with your favorite browser

14. Shut Tomcat down afterwards by using CTRL+C or ./Catalina.sh stop

15. If you were not able to reach Tomcat and see an error regarding the port, edit the file `usr/local/tomcat/conf/server.xml` and change:

```
<Connector port="8080" protocol="HTTP/1.1"
```

To an unused port, for example:

```
<Connector port="8550" protocol="HTTP/1.1"
```

## INSTALLING POSTGRESQL

16. Get the latest version of PostgreSQL by installing the “postgresql”-package with your corresponding package manager
17. Login as postgres user and run the following commands to create a database for onepoint PROJECTS:

```
sudo - -s /bin/sh postgres
psql
create user opproject password opproject;
create database opproject owner opproject encoding 'UTF-8';
\q
```

## INSTALLING ONEPOINT PROJECTS

18. Download the distribution of onepoint PROJECTS from the link in the mail you received:

```
cd /tmp
wget http://ftp.onepoint-projects.com/software/v15.0/onepoint-15.0u1-server.zip
```

19. Unzip the distribution

```
unzip onepoint-15.0u1-server.zip
```

20. After unzipping the distribution, move the “onepoint.war”-file to the “webapps”-folder of your Tomcat and make sure that the Tomcat user is the owner

```
mv ./onepoint-15.0u1-server/onepoint.war /usr/local/tomcat/webapps/
sudo chown tomcat:tomcat /usr/local/tomcat/webapps/onepoint.war
```

21. Start Tomcat with the previous commands

```
sudo su - -s /bin/sh tomcat
```

```
cd /usr/local/tomcat/bin  
./Catalina.sh start
```

22. Connect to Tomcat from your client using the IP of the server, the configured port and the name of the war file after a /, for example:

<http://192.168.0.10:8550/onepoint>

23. Follow the steps of onepoint PROJECTS' configuration wizard