



## **INSTALLING AND SETTING UP PLANFORGE WITH JAVA, TOMCAT AND POSTGRESQL ON LINUX**

## INSTALLING ORACLE JAVA

1. Download the Linux Version of OpenJDK from <https://openjdk.org/>
2. Extract the files from the downloaded archive

```
tar -xvf openjdk-20_linux-x64_bin.tar.gz
```

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

```
sudo mkdir -p /usr/lib/java  
sudo mv ./jdk-20/ /usr/lib/java/
```

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

```
sudo chown -R root:root /usr/lib/java/jdk-20/  
sudo chmod a+x /usr/lib/java/jdk-20/bin/java  
sudo chmod a+x /usr/lib/java/jdk-20/bin/javac
```

## INSTALLING TOMCAT

1. Get the latest Tomcat 9 version from <https://tomcat.apache.org/download-90.cgi>  
Download the “.tar.gz”-distribution. Please note that Tomcat 10 or later are currently not supported.

2. Extract the files of Tomcat

```
tar xvf apache-tomcat-9.0.73.tar.gz
```

3. Create a user and group “tomcat”

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

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

```
sudo chown -R tomcat:tomcat apache-tomcat-9.0.73/
```

5. Create a “setenv.sh”-file

```
sudo nano ./apache-tomcat-9.0.73/bin/setenv.sh
```

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

```
#!/bin/sh
#
export JAVA_HOME='/usr/lib/java/jdk-20/'
export JAVA_OPTS='-Djava.awt.headless=true -Xms2048m -Xmx2048m'
```

7. Move the Tomcat folder to an alternative directory

```
sudo mv apache-tomcat-9.0.73/ /usr/local/tomcat
```

8. 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
```

9. Test the connection by connecting to <http://localhost:8080> with your favorite browser
10. Shut Tomcat down afterwards by using CTRL+C or `./catalina.sh stop`
11. 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

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

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

## INSTALLING PLANFORGE

1. More details can also be found in the installation and configuration can also be found on our website at: <https://downloads.planforge.io/documentation/planforge-server-installation.pdf>

2. Download the distribution of Planforge from the link in the mail you received:

```
cd /tmp
wget https://downloads.planforge.io/releases/planforge-22.1.3-server.zip
```

3. Unzip the distribution

```
unzip planforge-22.1.3-server.zip
```

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

```
sudo mv ./planforge.war /usr/local/tomcat/webapps/
sudo chown tomcat:tomcat /usr/local/tomcat/webapps/planforge.war
```

5. Start Tomcat with the previous commands

```
sudo su - -s /bin/sh tomcat
cd /usr/local/tomcat/bin
a. ./catalina.sh start
```

6. 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/planforge>
7. Upload the license file “license.oxl.xml” in the first step of the configuration wizard.
8. In the next step, select “PostgreSQL” as the database type and leave the host name and port as is. Change the database, username and password fields if necessary (default value in the wizard corresponds with the steps above).
9. Optionally adjust any of the settings in the last step and click “Finish”.
10. After a few moments, you should be forwarded to the login page, where you can now login with “administrator” and the password you set.
11. You can now get started with your Planforge instance!