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DHIS2 Installation on Windows Local Server

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DHIS2 Installation on Windows Local Computer

Online link: <https://dhis2trainingland.com/eportal/?tutorial=dhis2-installation-on-windows-local-server>

Last updated: January 16, 2022

Author: Julhas Sujan

Step-1: Software download

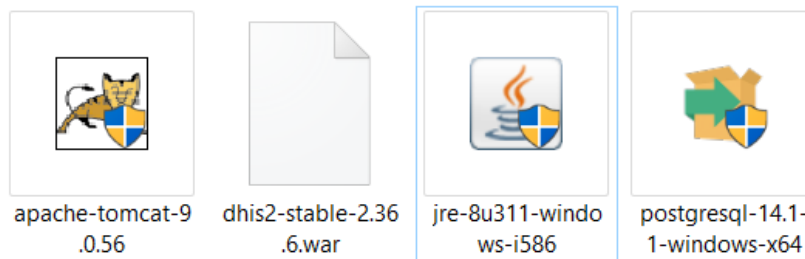
We'd like to set up DHIS2 version 2.36. As a result, you'll need to get the following software's:

- 1. DHIS2 2.36 (<https://dhis2.org/downloads/>)
- 2. Java 1.8 (<https://www.java.com/en/download/manual.jsp> Windows offline 64 bit)
- 3. Tomcat 9 (<https://tomcat.apache.org/download-90.cgi, 32-bit/64-bit> Windows Service Installer)
- 4. PostgreSQL 14 (<https://www.postgresql.org/download/windows>, Download the installer)

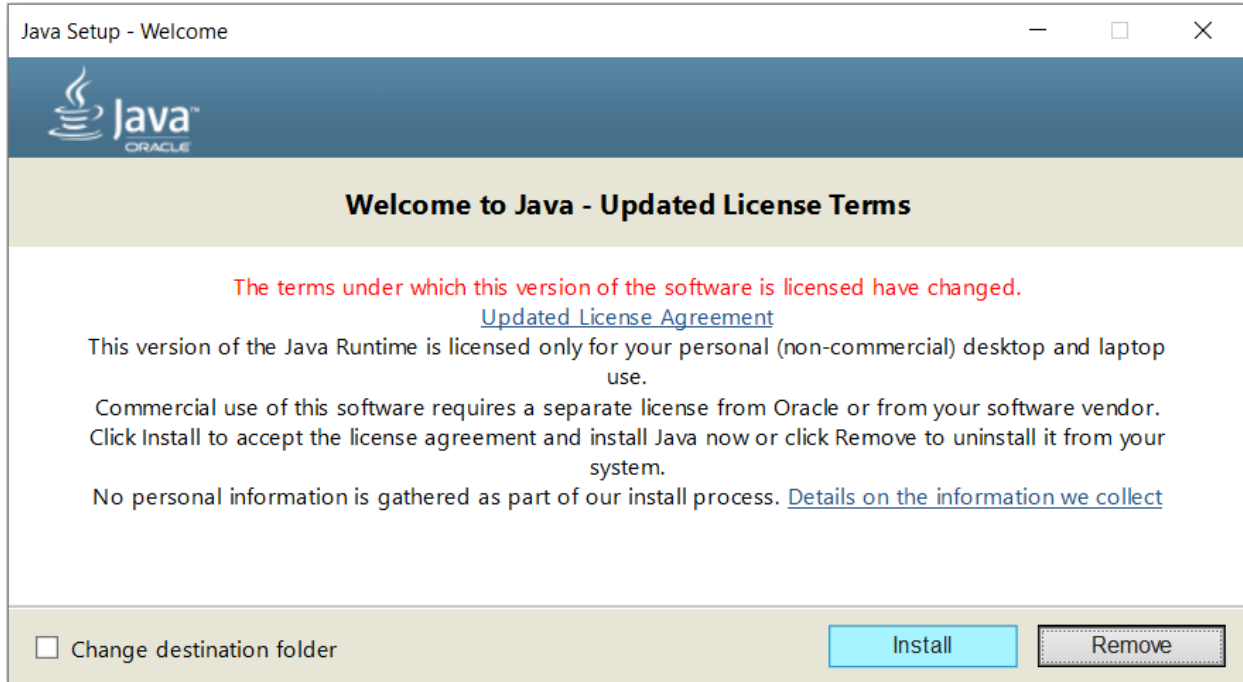
Download all from the following link: [Click here](#)

Step-2: Install Java

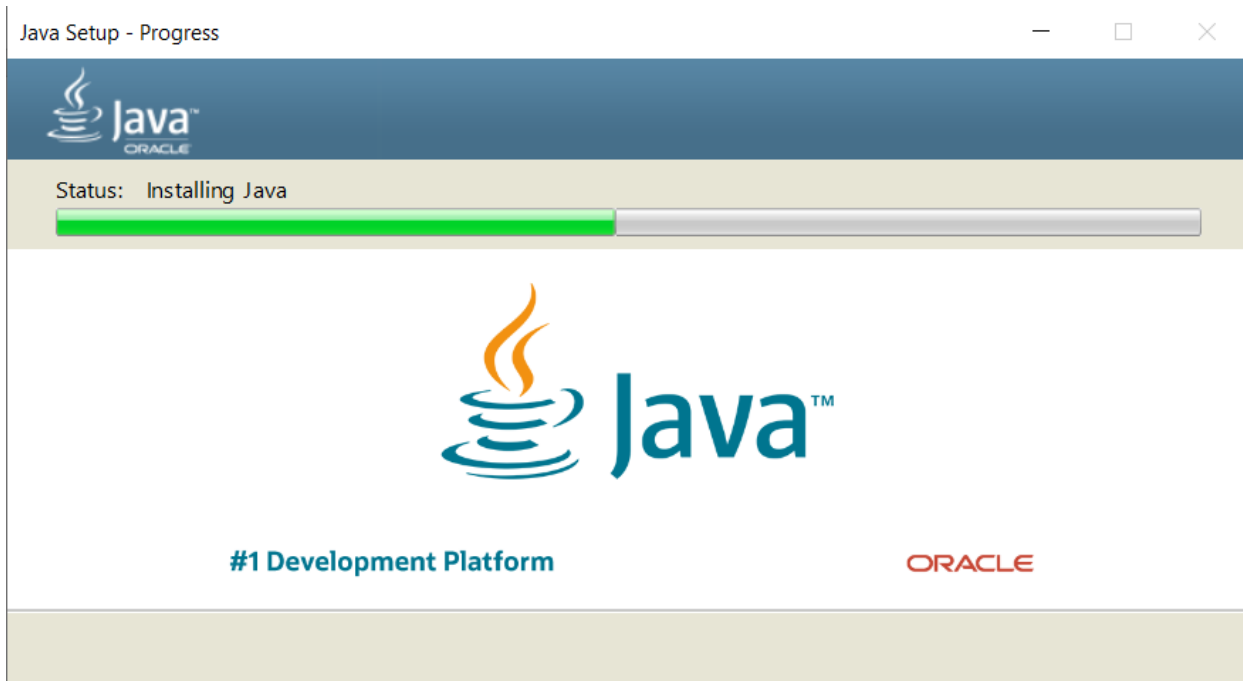
After unpack, you can see the following software's:



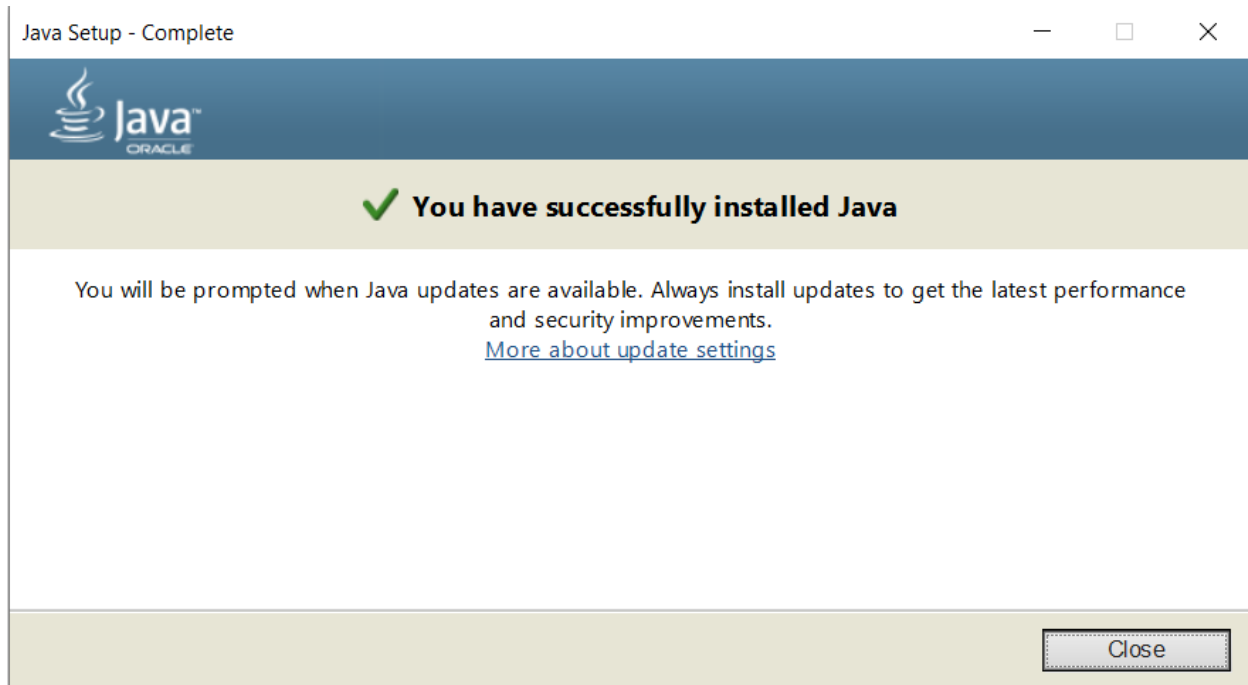
2.1 Double click on the jre-8u311-windows-i586 and then click on the Install button



2.2 Started Java Installation:

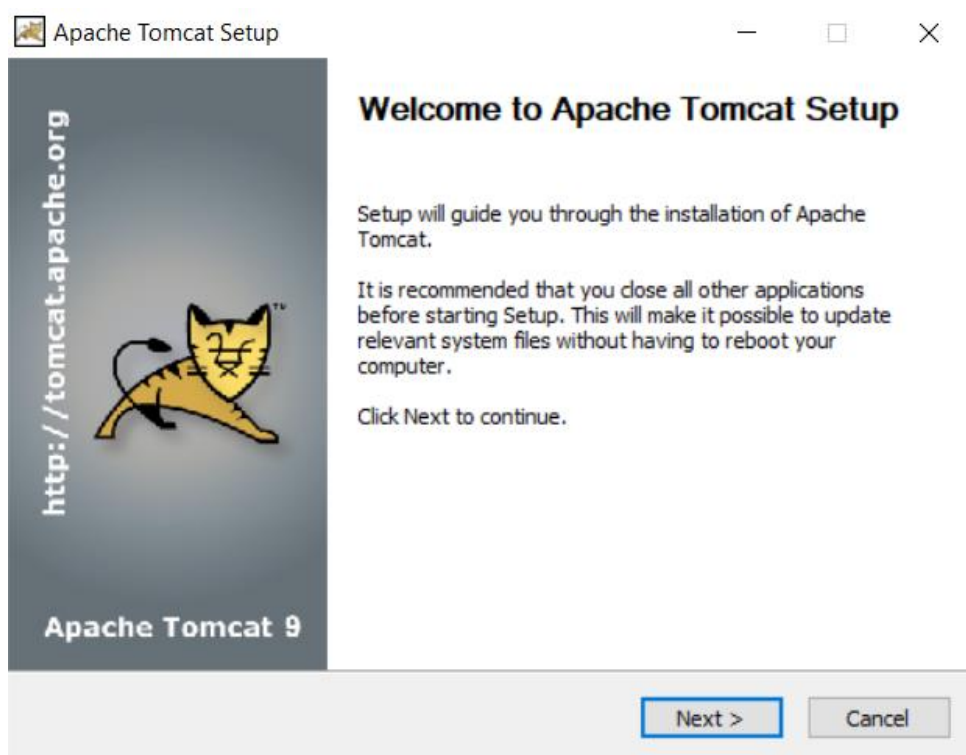


2.3 Completed installation:

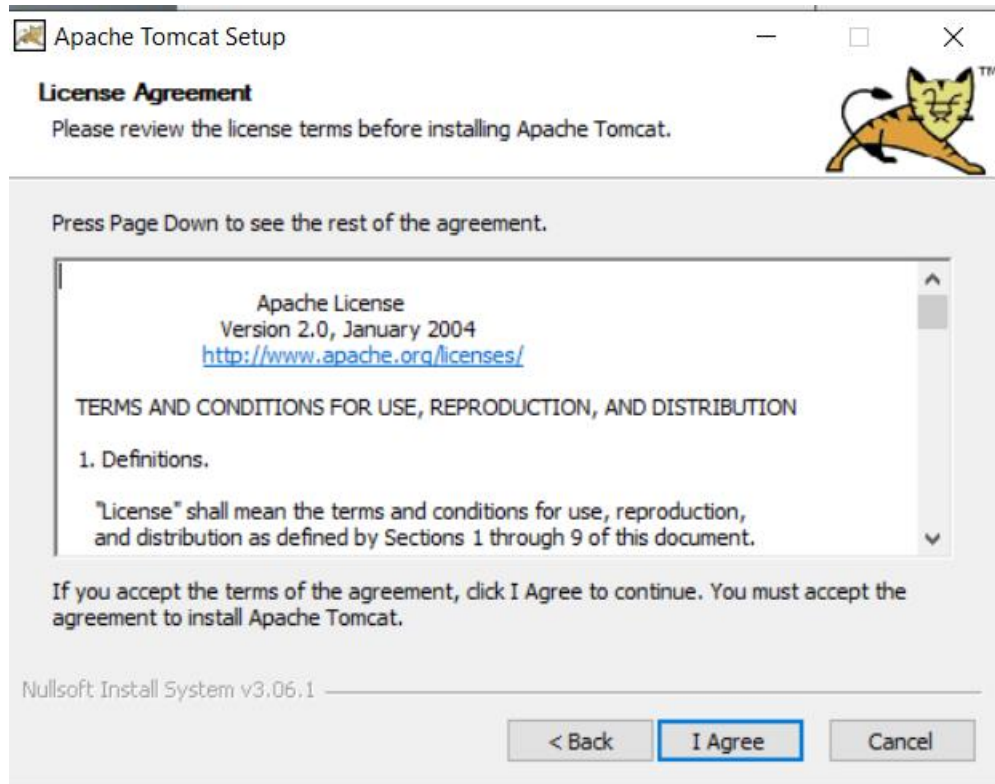


Step-3: Install Tomcat

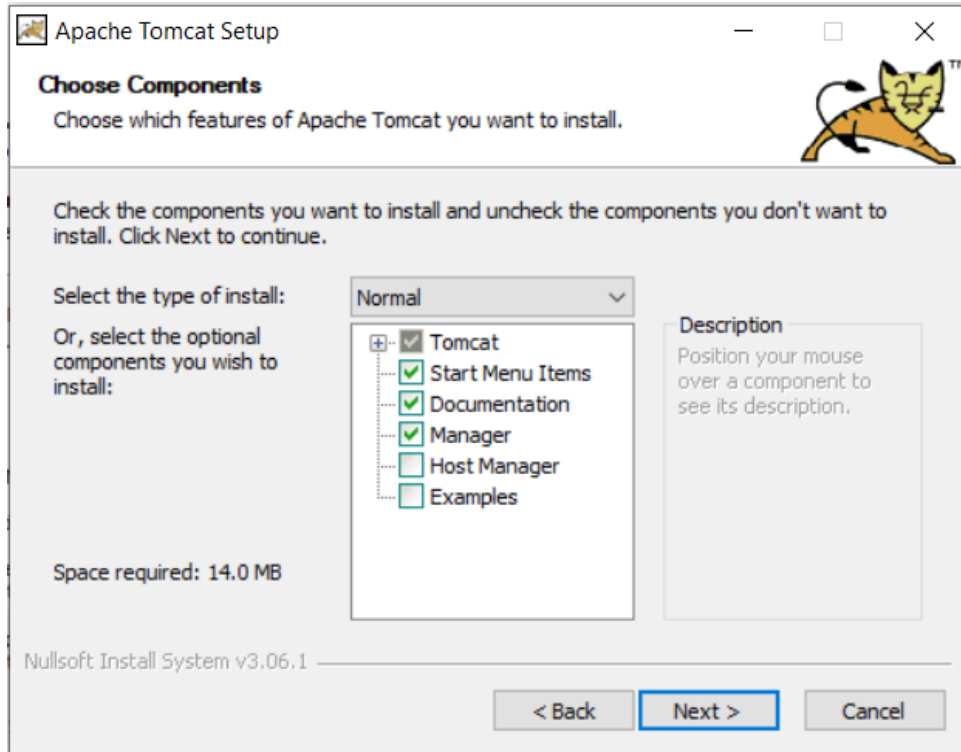
3.1 Double click on the apache-tomcat-9.0.56 and then click on the “Next” button:



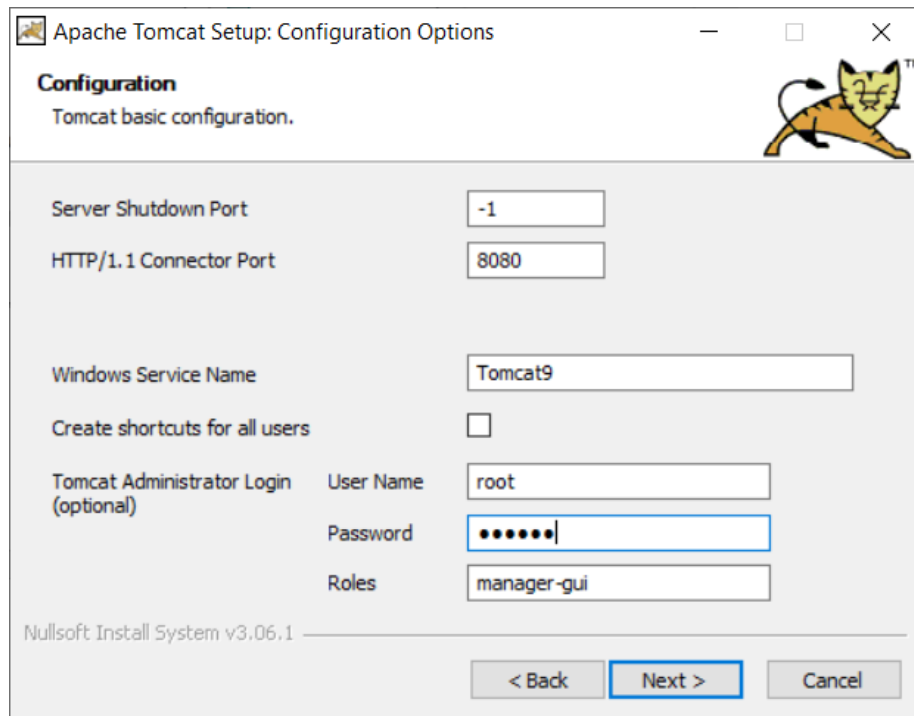
3.2 Click on I Agree button:



3.3 Choose components and click on the Next button



3.4 Now, you need to provide Username and Password and click on the Next button:

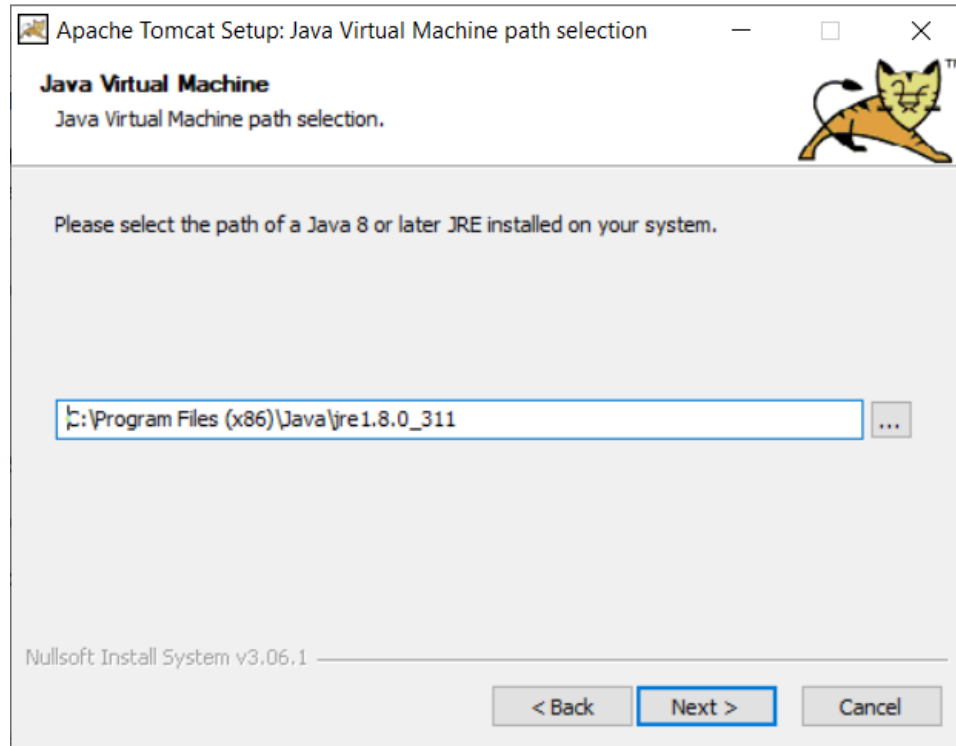


Username: root

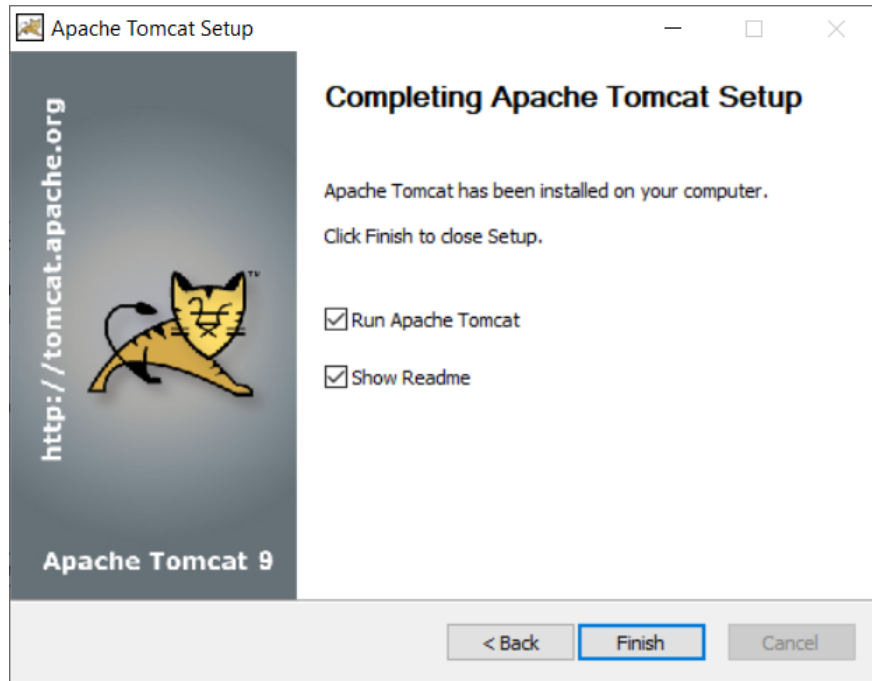
Password: 123456

Note: You can set your own username and password.

3.5 You can change the default path and click on the Next button:

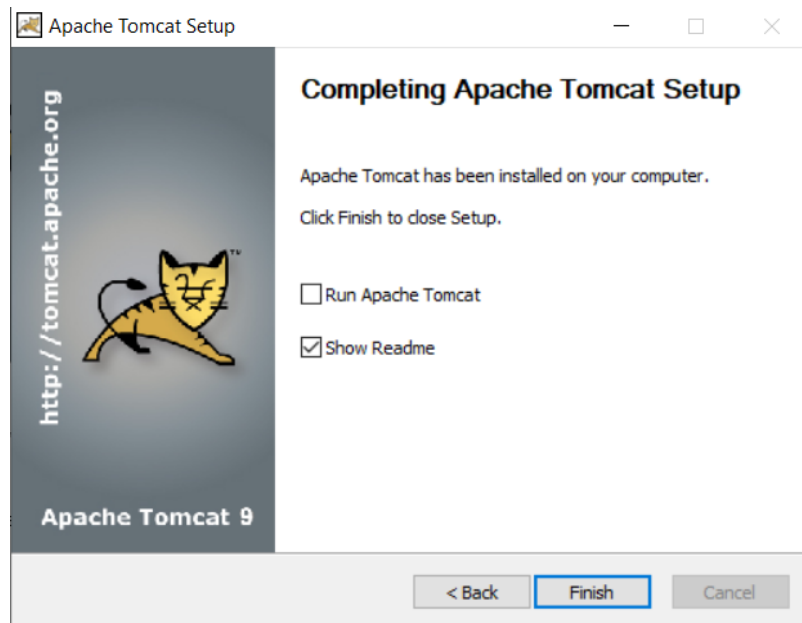


3.6 Uncheck the "Run Apache Tomcat" and then click on the Finish button.



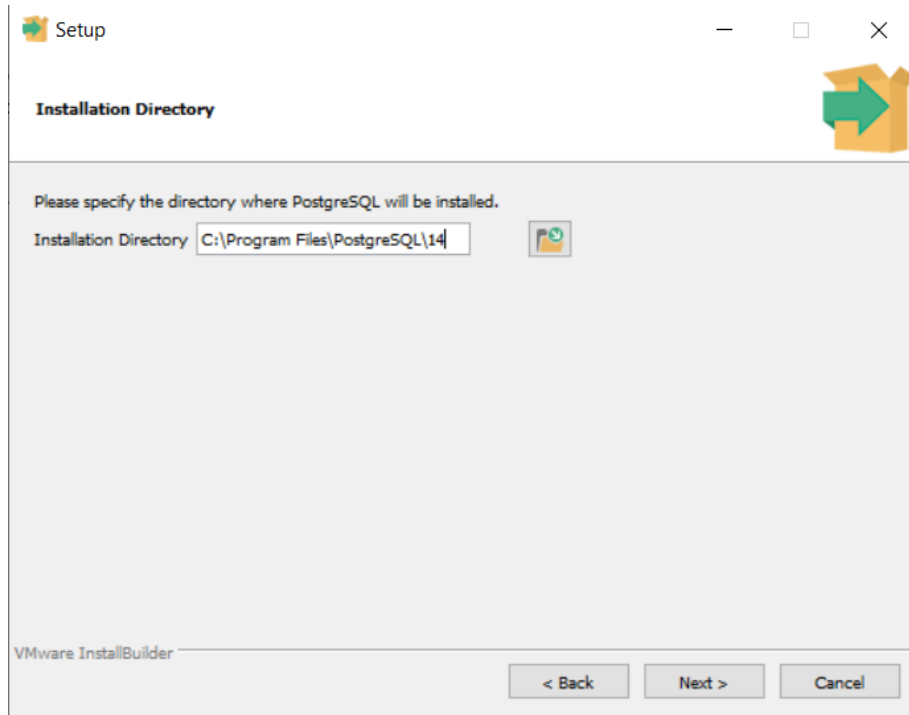
We don't want to run the Apache right now.

3.7 Finished installation

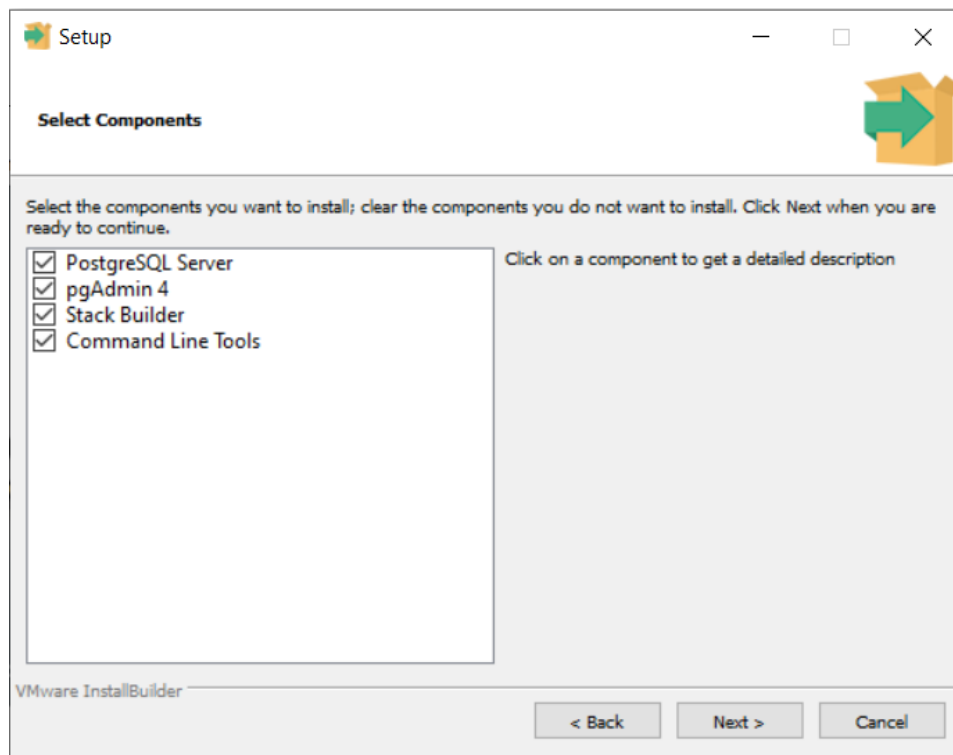


Step-4: PostgreSQL Installation

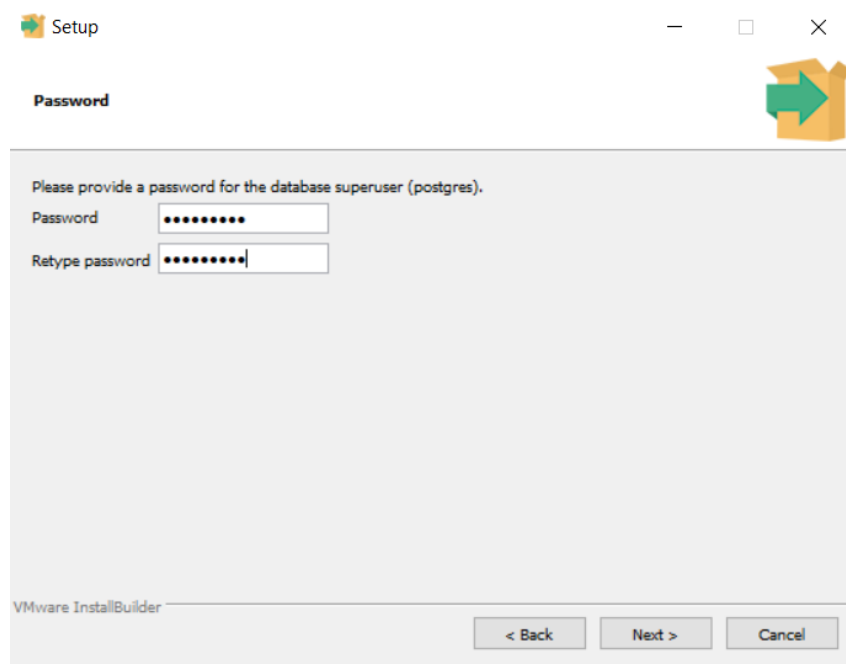
4.1 Double click on the "postgresql-14.1-1-windows-x64" and proceed with Next button and define your installation directory:



4.2 Select the following components (Default it will be selected) and click on the Next button:

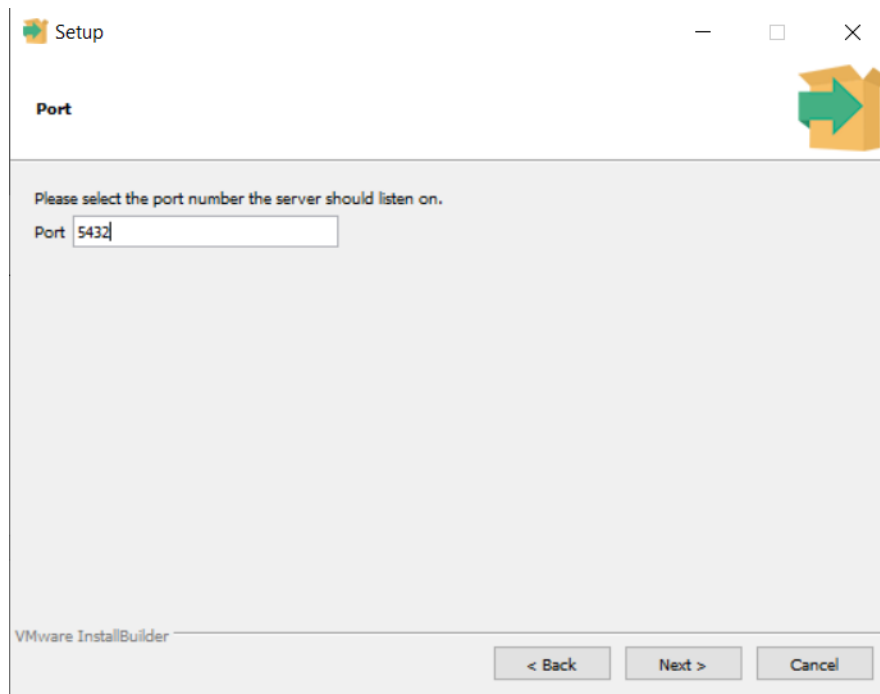


4.3 Set the master password for the superuser 'postgres'



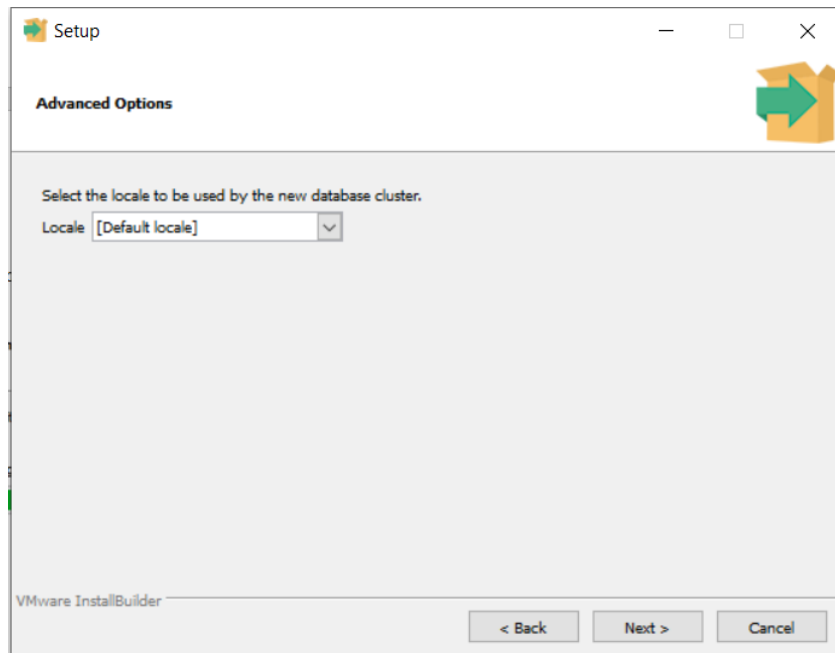
The screenshot shows a window titled "Setup" with a "Password" section. The text reads: "Please provide a password for the database superuser (postgres)." There are two input fields: "Password" and "Retype password", both containing masked characters (dots). At the bottom, there are three buttons: "< Back", "Next >", and "Cancel". The VMware InstallBuilder logo is visible in the bottom left corner.

I set password as "dhis@2022". We will use it for opening the pgAdmin 4. Keep the default port as 5432.

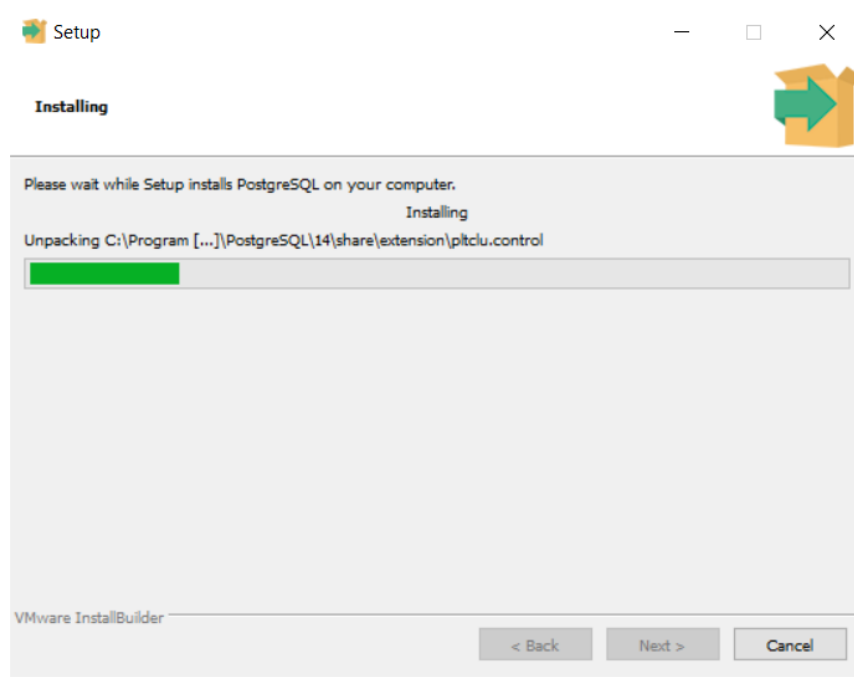


The screenshot shows a window titled "Setup" with a "Port" section. The text reads: "Please select the port number the server should listen on." There is one input field labeled "Port" containing the value "5432". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel". The VMware InstallBuilder logo is visible in the bottom left corner.

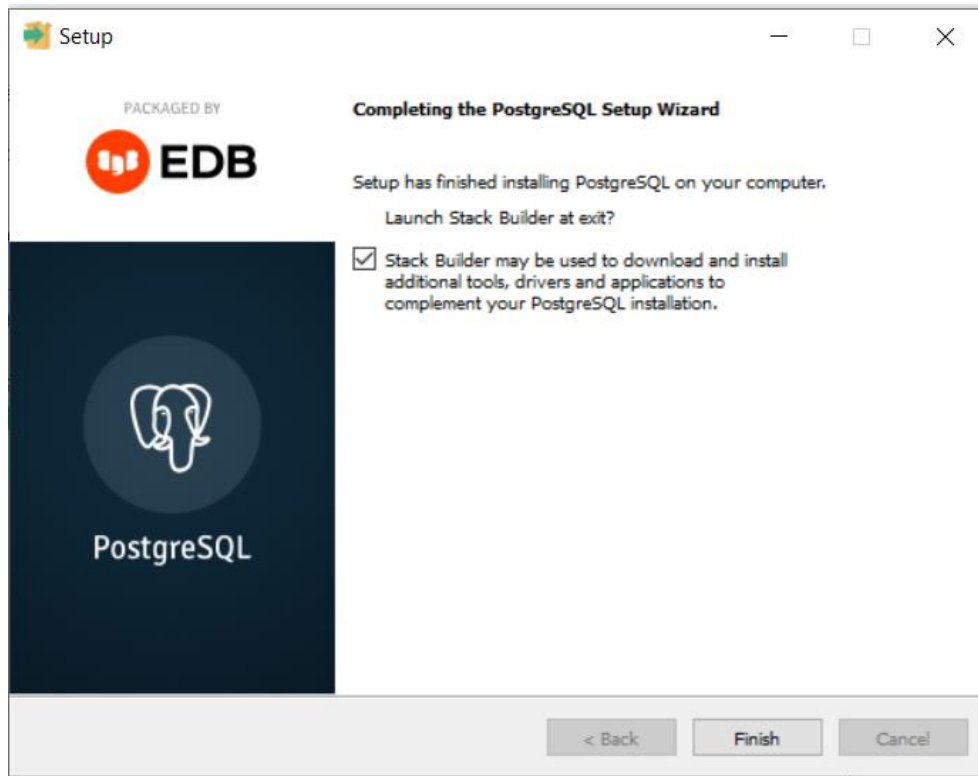
Keep the locale as it is:



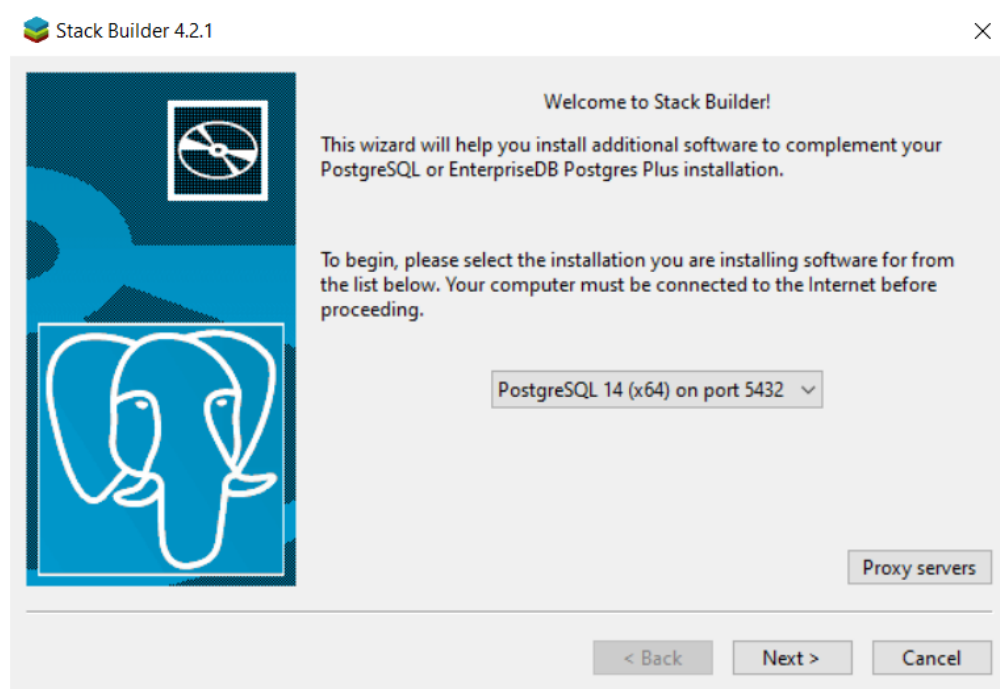
4.4 Proceed with installation and it may take a few moments and click on the Next button:



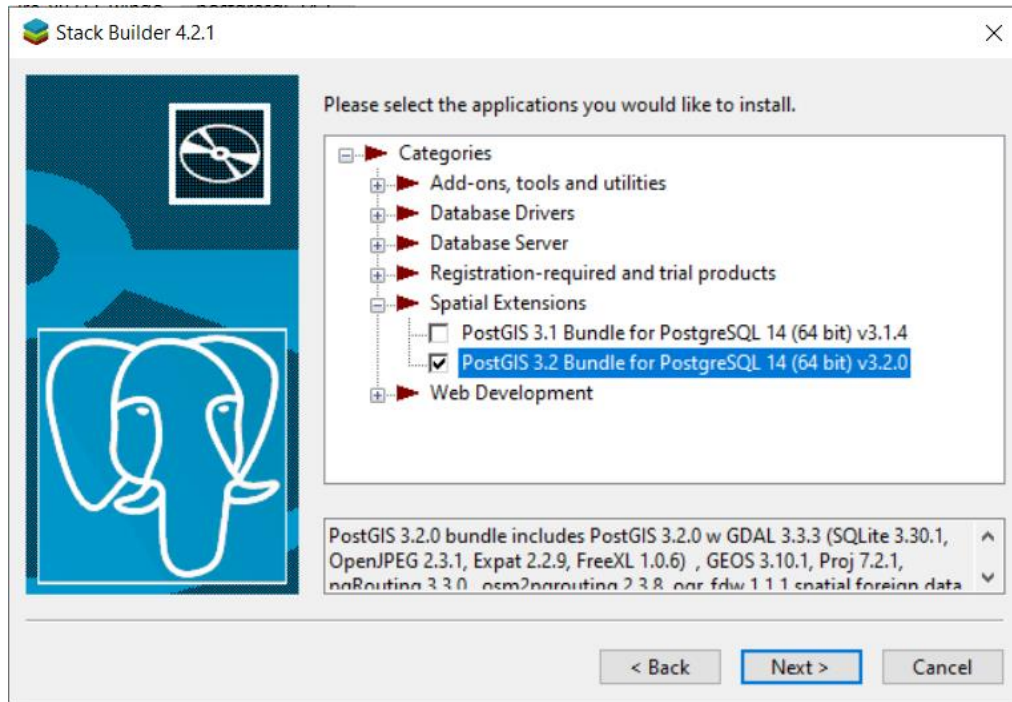
4.5 Click on the Finish button and it will show you the another window for Stack Builder (Don't uncheck Stack Builder):



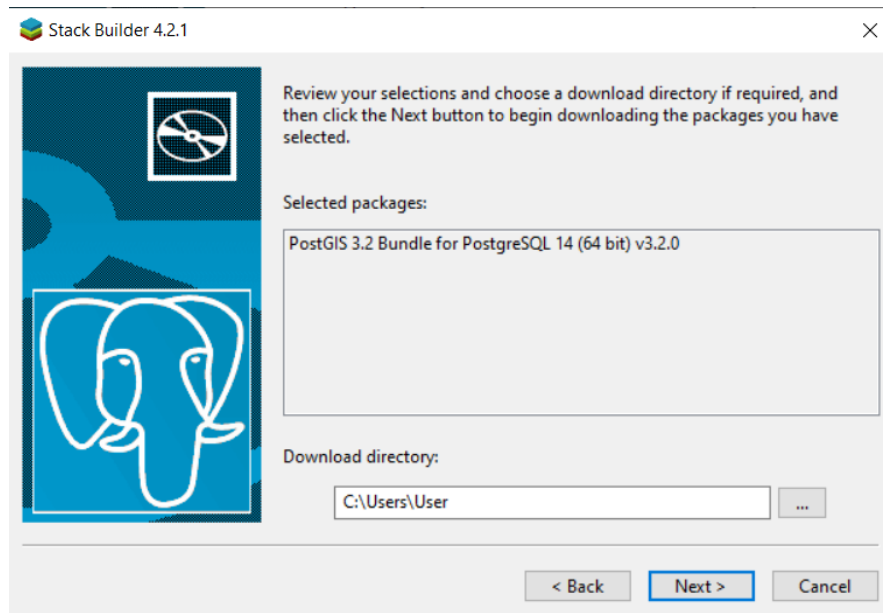
4.6 Now select the PostgreSQL 14 and click on the Next button:



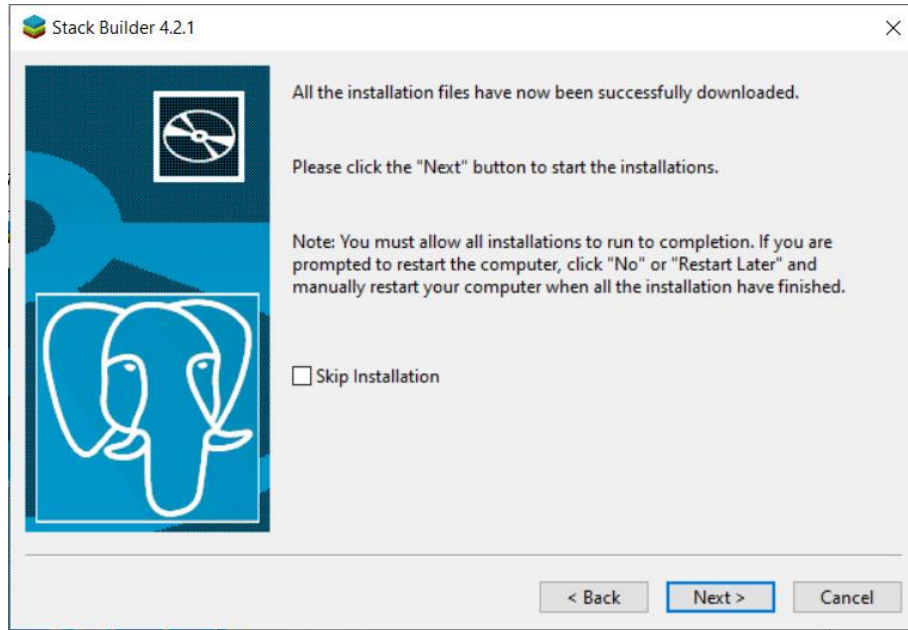
4.7 Expand the Spatial Extension and tick on the 2nd one:



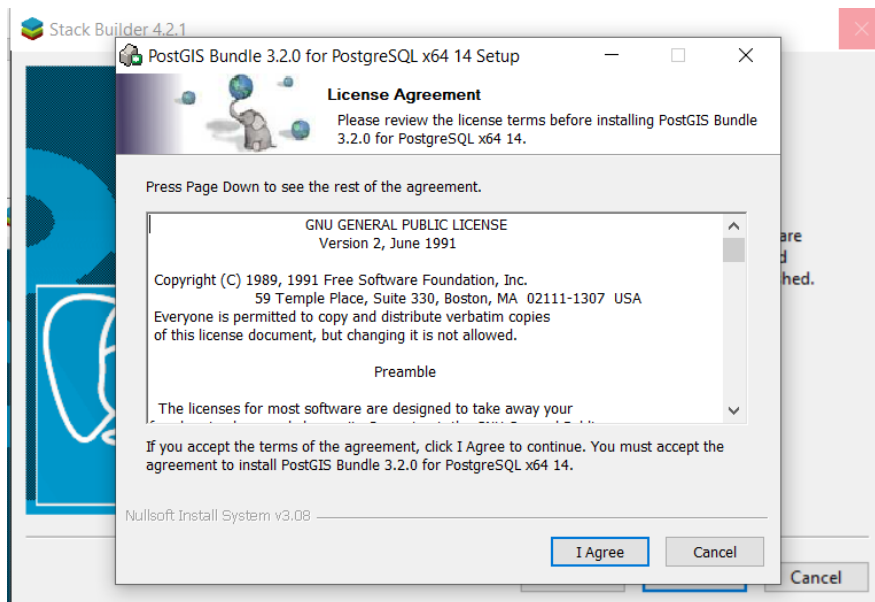
4.8 Select destination and click on the Next button:



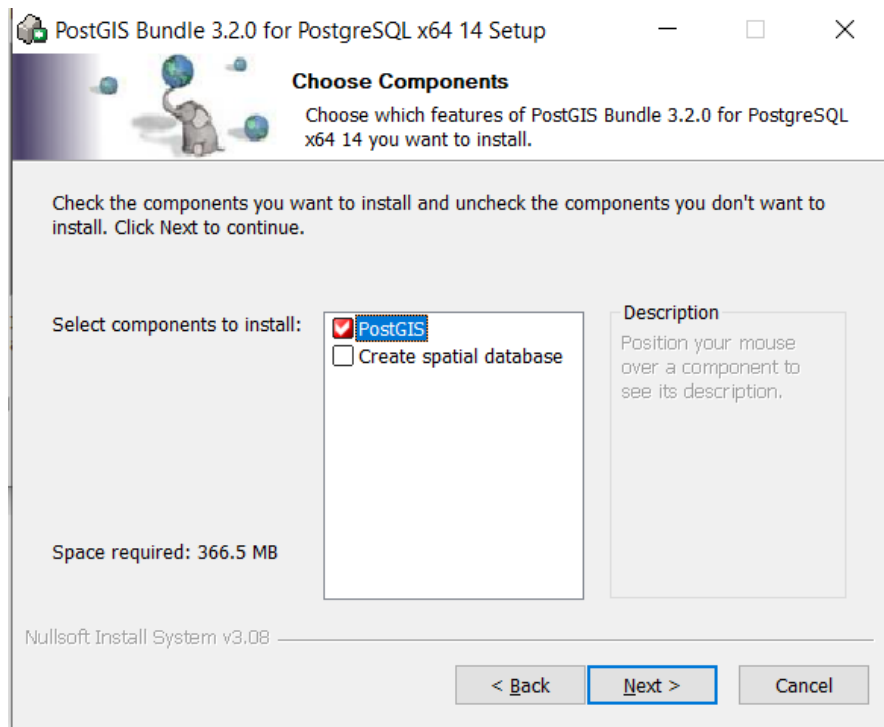
Note: Don't click on "Skip installation" Click on the Next button:



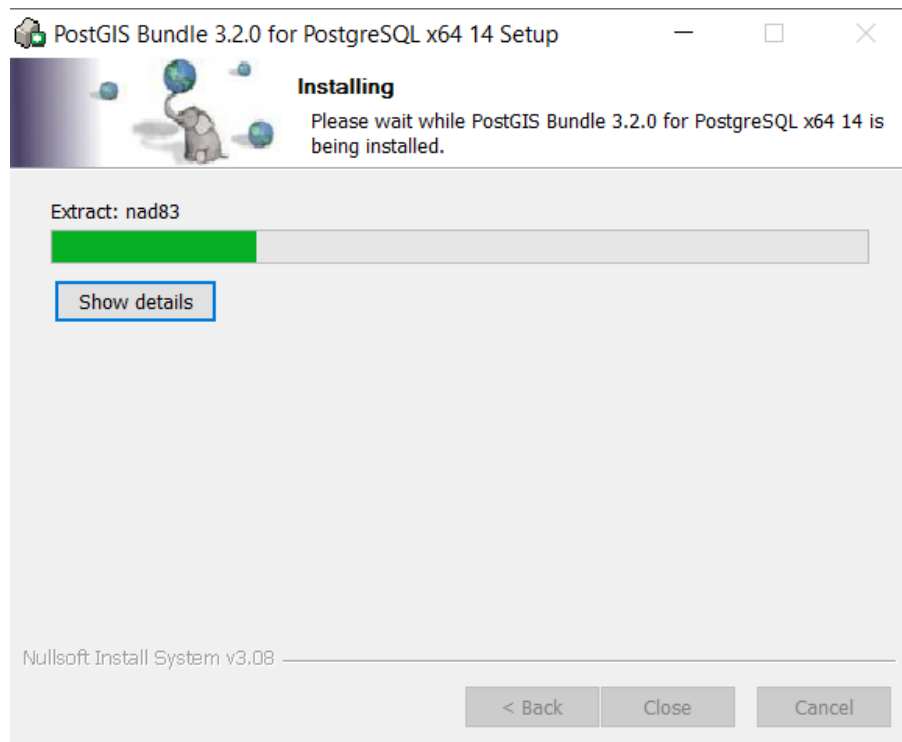
Click on the I Agree button:



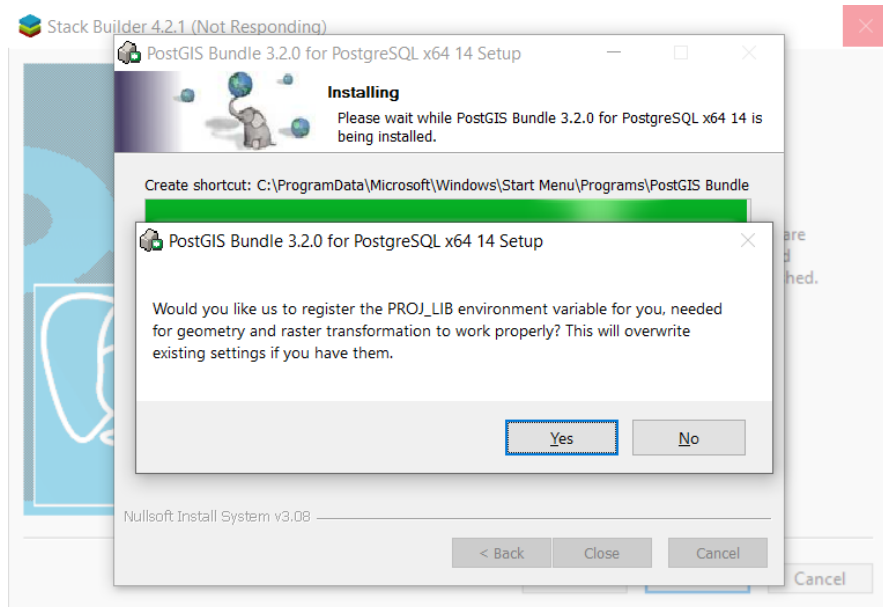
4.9 Select component to install. By default the PostGIS will be selected so just click on the Next button:



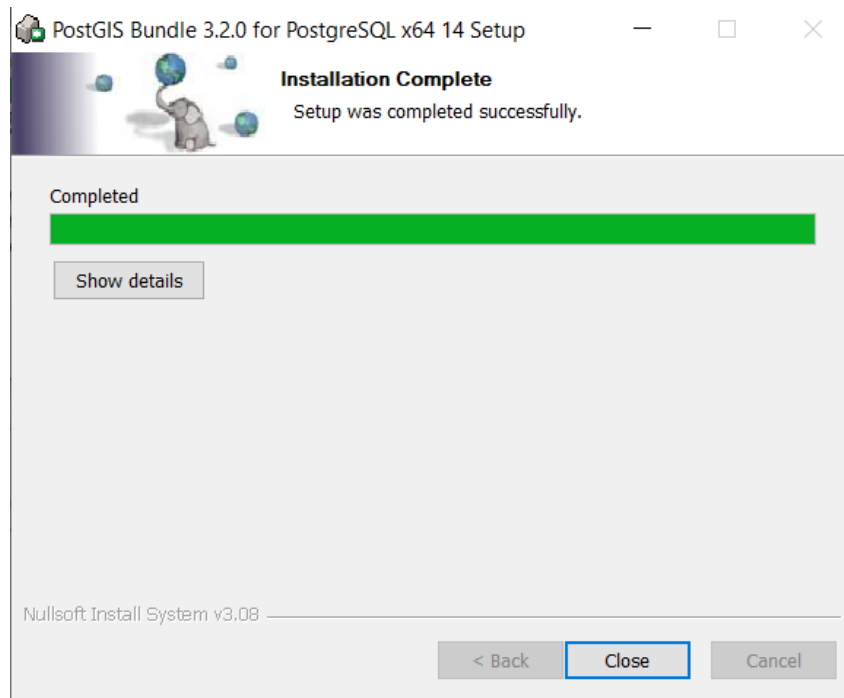
Select destination and click on the Next button.



4.10 Now you can see some Pop-up windows and click on the Yes button for all:

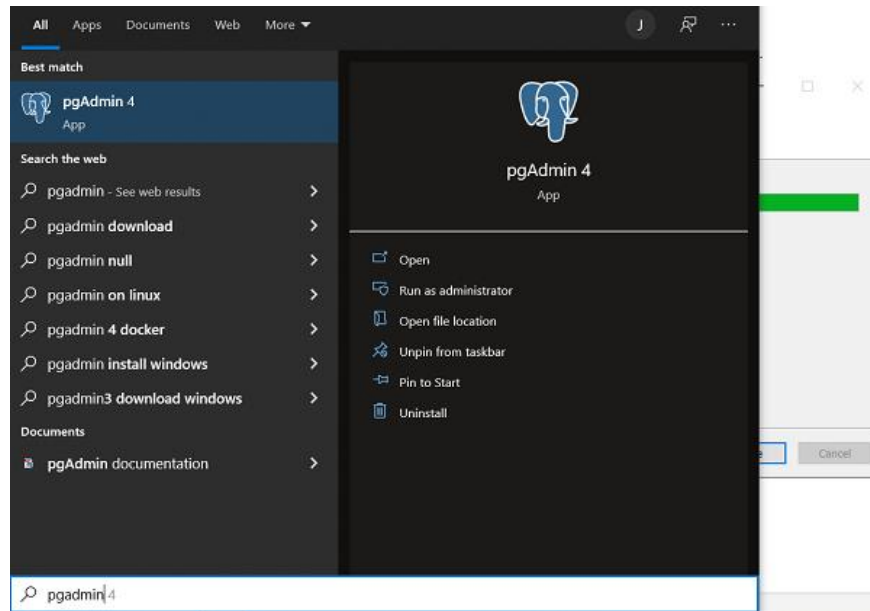


4.11 Wait for a while and it will finish the PostgreSQL installation.

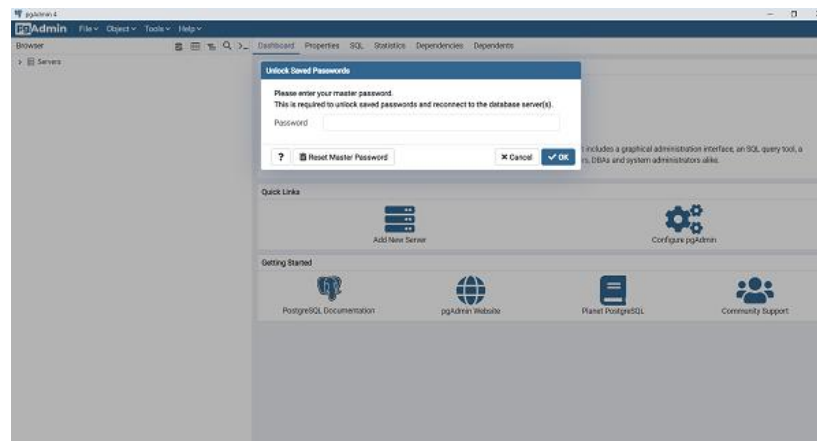


Click on the Close button and finish the installation procedure.

4.12 Now go to your Computer Search panel and type pgAdmin:

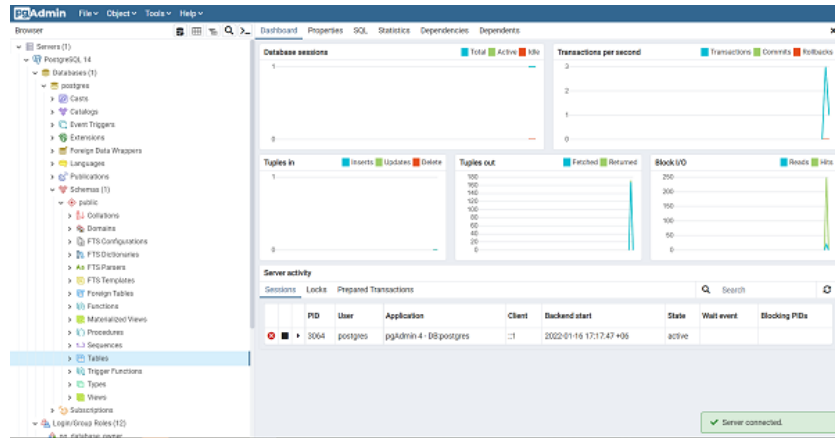


Open the pgAdmin 4. It may take a few moments and you can see the following window:



Provide here the password that you set during installation. We set dhis@2022 as password.

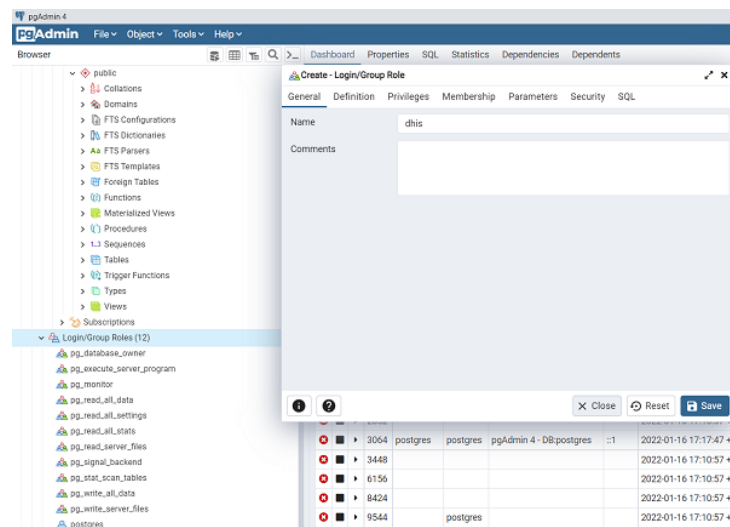
Note: If the password doesn't work, click on the reset password button and set the same password. See the pgAdmin Dashboard:



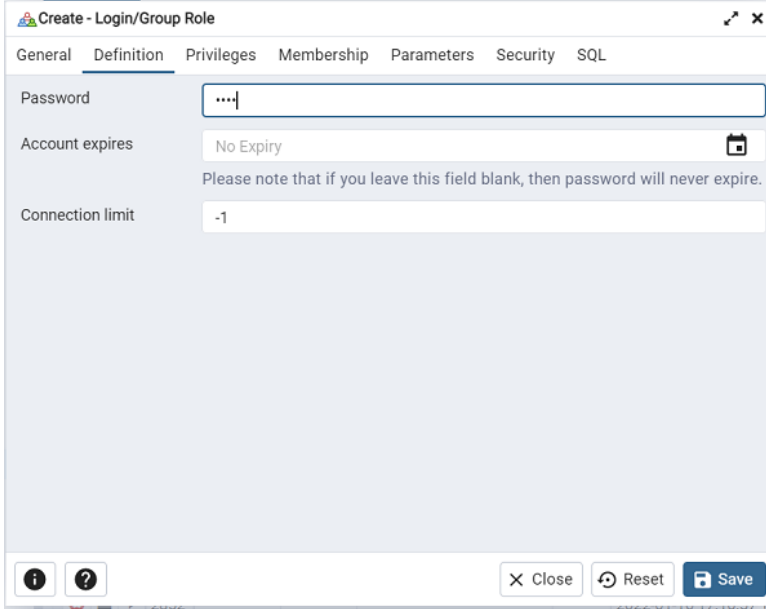
So far, we have completed the Java, Tomcat and PostgreSQL installation. Our next step will be to create database for our local server.

Step-5: Database creation

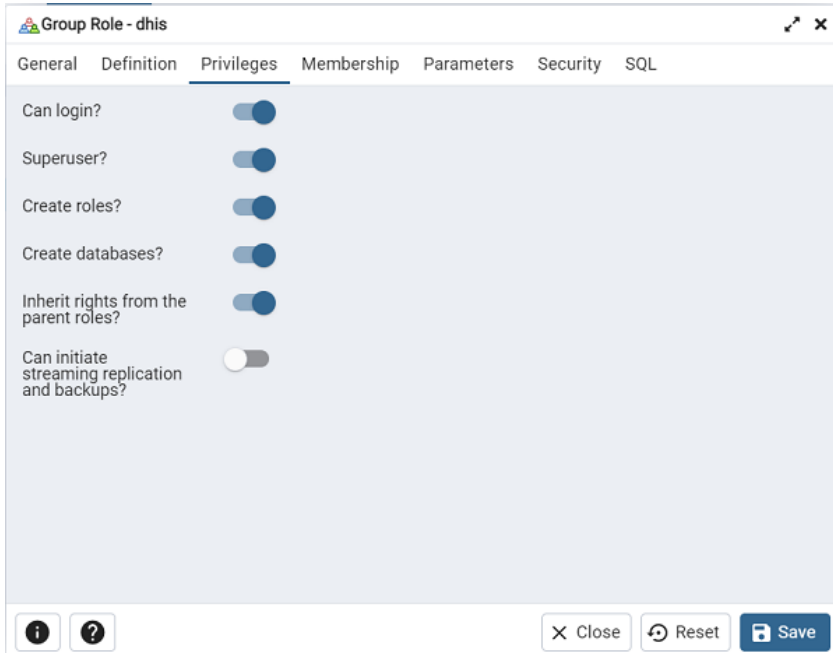
5.1 Click on the Login/ Group Roles and create the following roles:



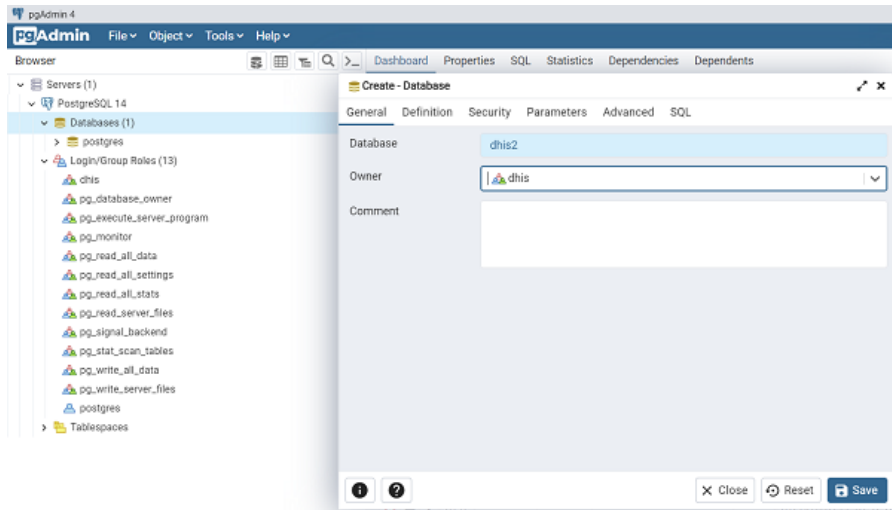
Set password for the role as 'dhis' and click on the Save button:



Click on the Privileges and allow all of the access:

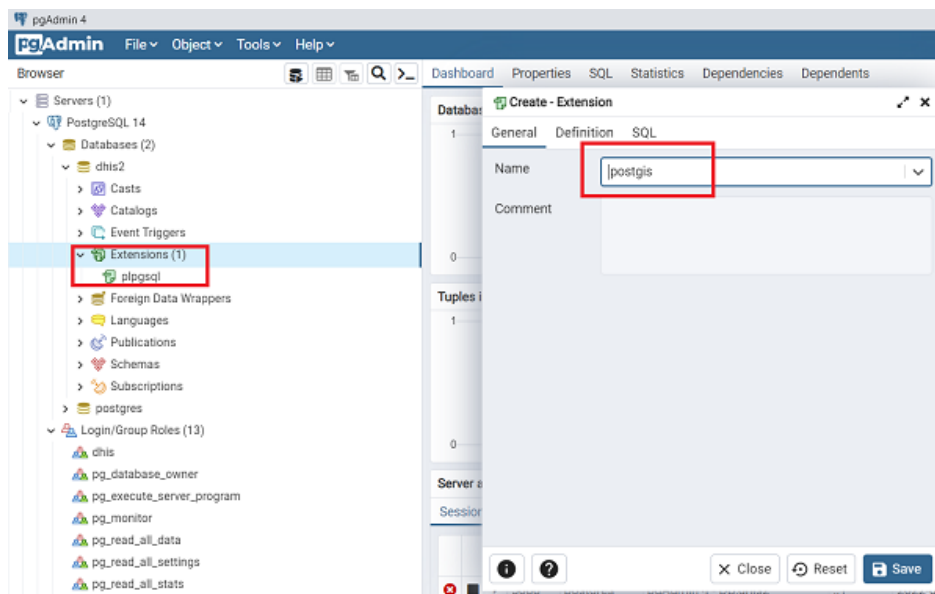


5.2 Now we will create a new database 'dhis2' by right click on the Databases:



Database name: dhis2
Owner: dhis (just select from the dropdown)
Click on the save button.

5.3 Now we will create 'postgis' extension:

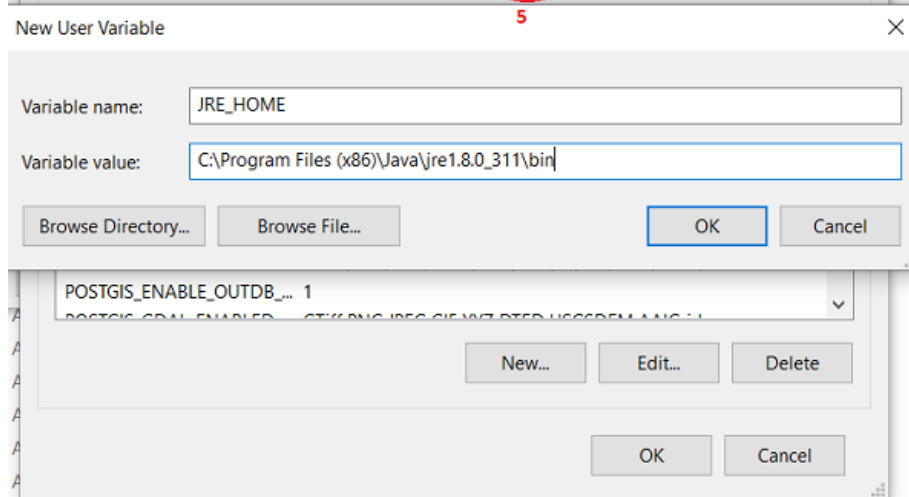
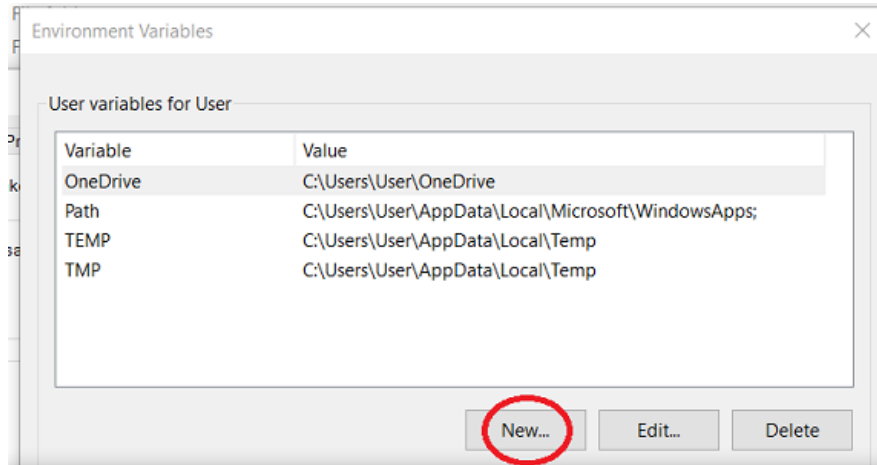
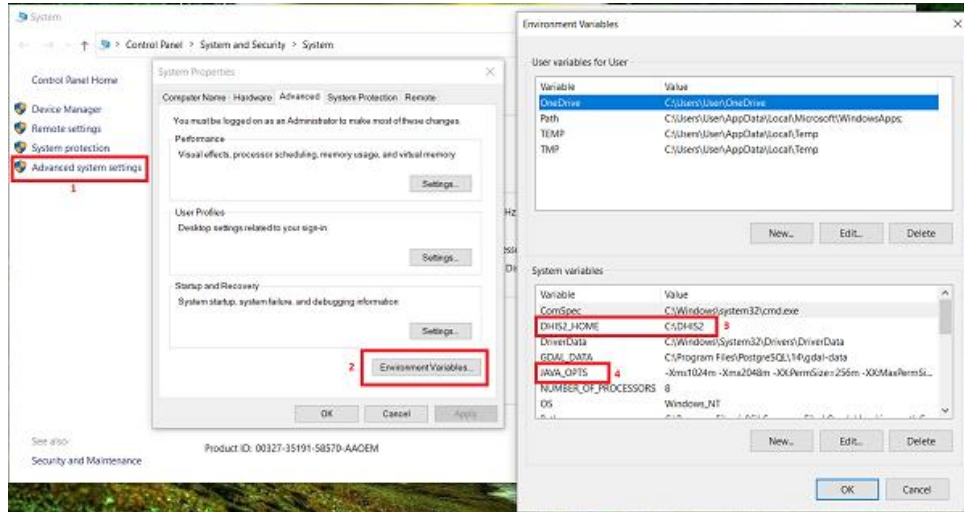


Select the extension name from the dropdown and click on the save button.

For now, we have finished the database part of the DHIS2 instance setup. Now we need some configuration of the installed software's.

Step-6: Configurations

6.1 Environment variable set: Right click on The PC and click on Properties:



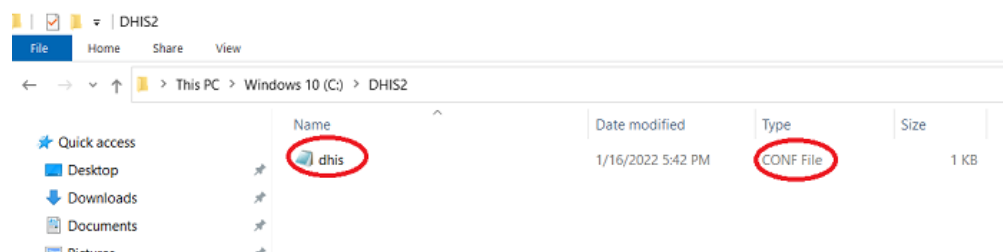
1. Click on the Advanced system setting
2. Environment variables
3. Add System variable as “DHIS2_HOME” and value as “C:\DHIS2” and make sure to create the same directory under C drive.
4. Add “JAVA_OPTS” as set the value as “-Xms1024m -Xmx2048m -XX:PermSize=256m -XX:MaxPermSize=1024m”
5. Add path of Java
 - A. Variable: JRE_HOME
 - B. Value: C:\Program Files (x86)\Java\jre1.8.0_311\bin

Note: Please double check your Java installation directory.

6.2 DHIS2 Configuration file: copy the following code and save it as ‘dhis.conf’ at the directory “C:\DHIS2”.

```
# Hibernate SQL dialect
connection.dialect = org.hibernate.dialect.PostgreSQLDialect
# JDBC driver class
connection.driver_class = org.postgresql.Driver
# Database connection URL
connection.url = jdbc:postgresql:dhis2
# Database username
connection.username = dhis
# Database password
connection.password = dhis
# Database schema behavior, can be validate, update, create, create-drop
connection.schema = update

# Encryption password (sensitive)
encryption.password = abcd
```



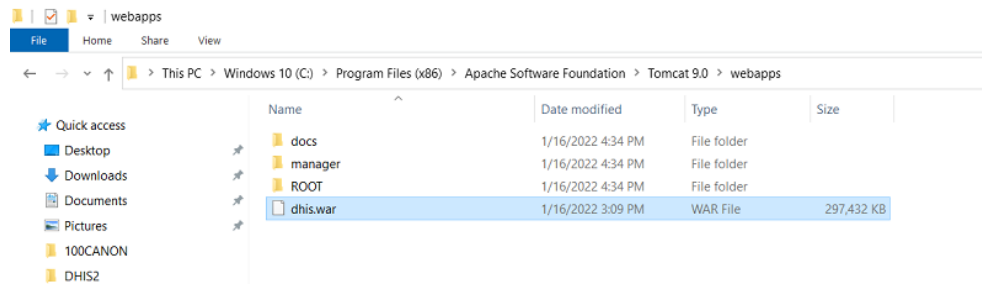
Note: Don't save this file as .txt or config it should be .conf.

Now we will move to the final step for the DHIS2 war file deployment.

Step-7: Final step

7.1 Copy the dhis2 war file from your downloaded directory and rename it as 'dhis.war' and paste it under the following directory where the Apache is installed:

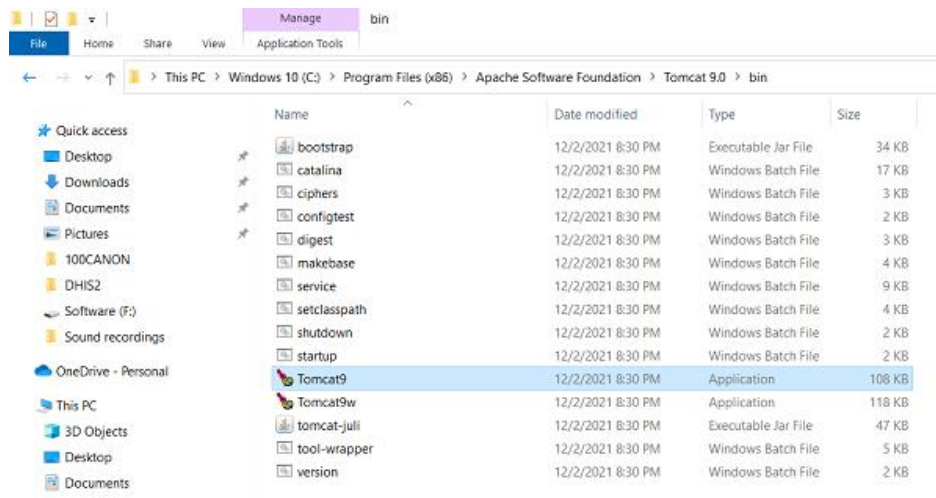
- C:\Program Files (x86)\Apache Software Foundation\Tomcat 9.0\webapps



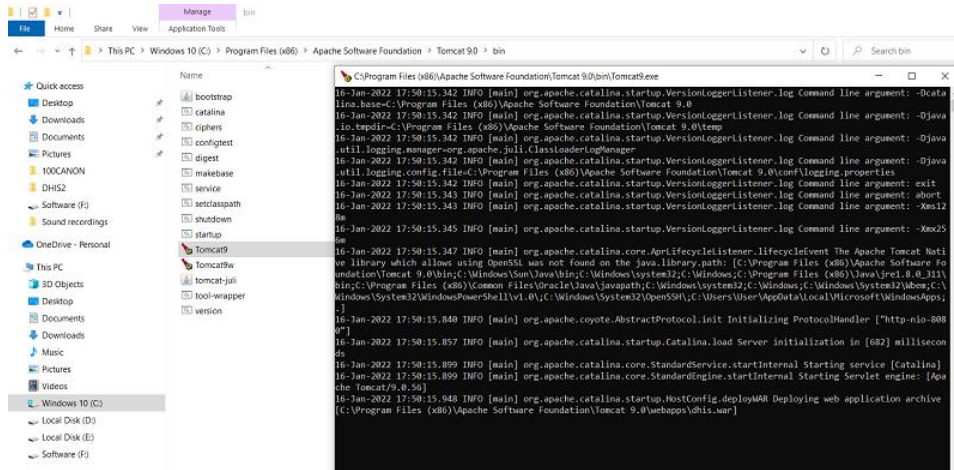
7.2 Now run the Tomcat

- Location: C:\Program Files (x86)\Apache Software Foundation\Tomcat 9.0\bin
- Right click and run as administrator:

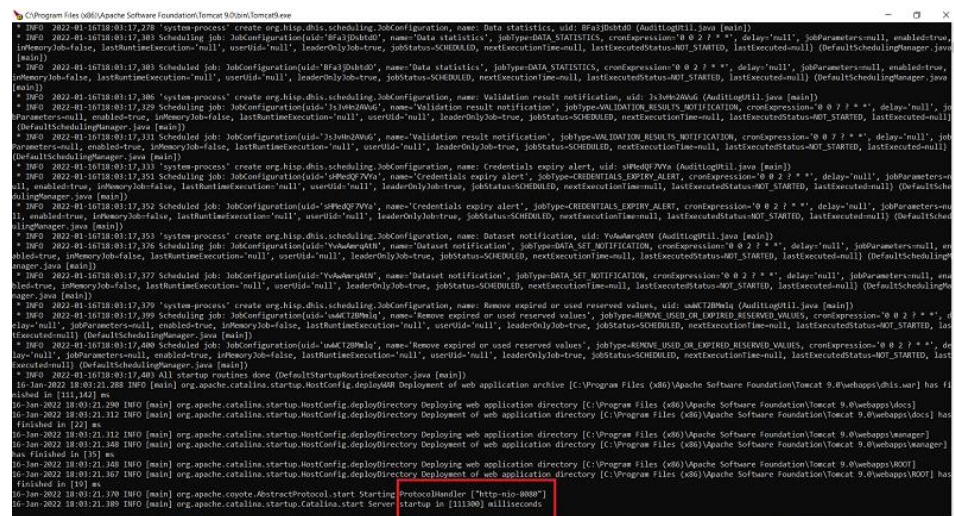
You can see the following window:



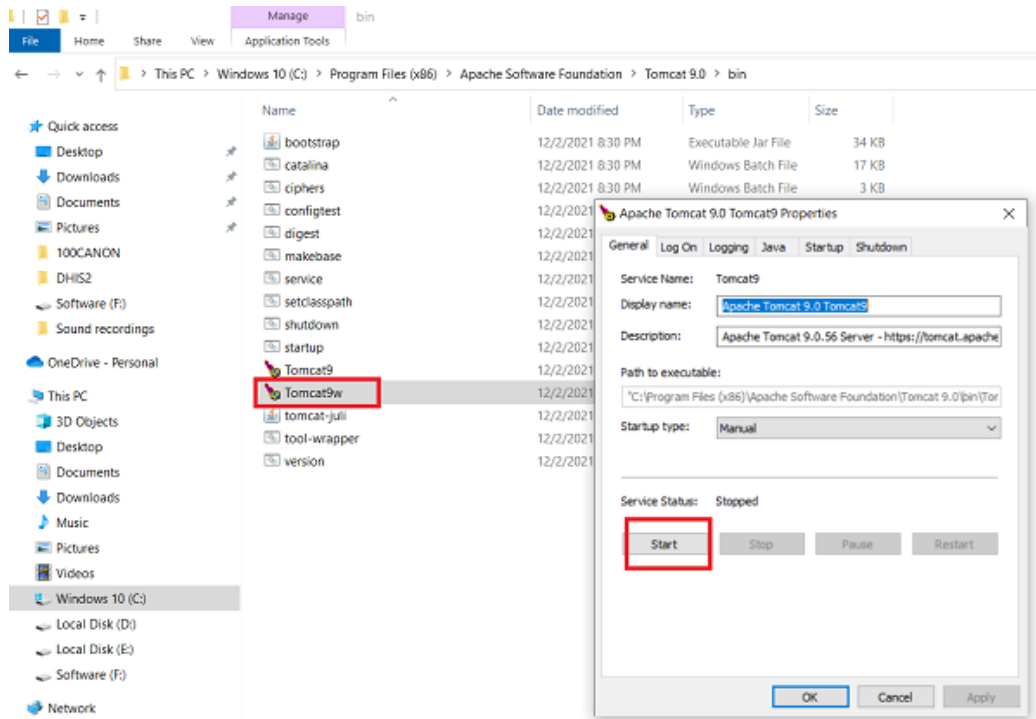
For the war file deployment, it will take a few moment. Wait until the following screen is appeared.



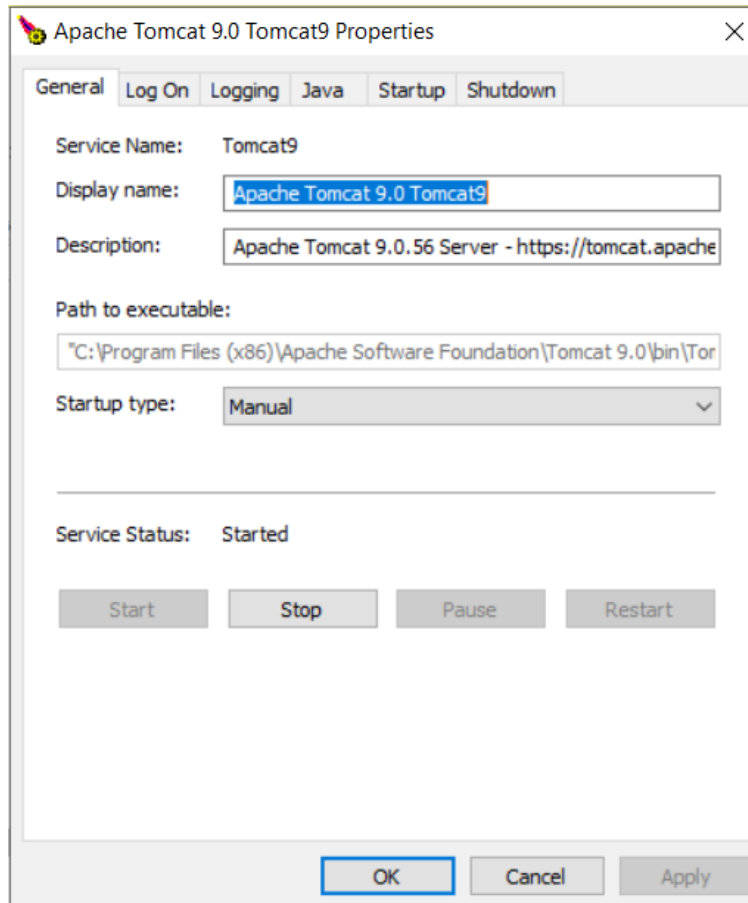
Note: If you encounter any error you can see here.



7.3 Run the tomcat: Right click on the Tomcat9w and run as administrator:



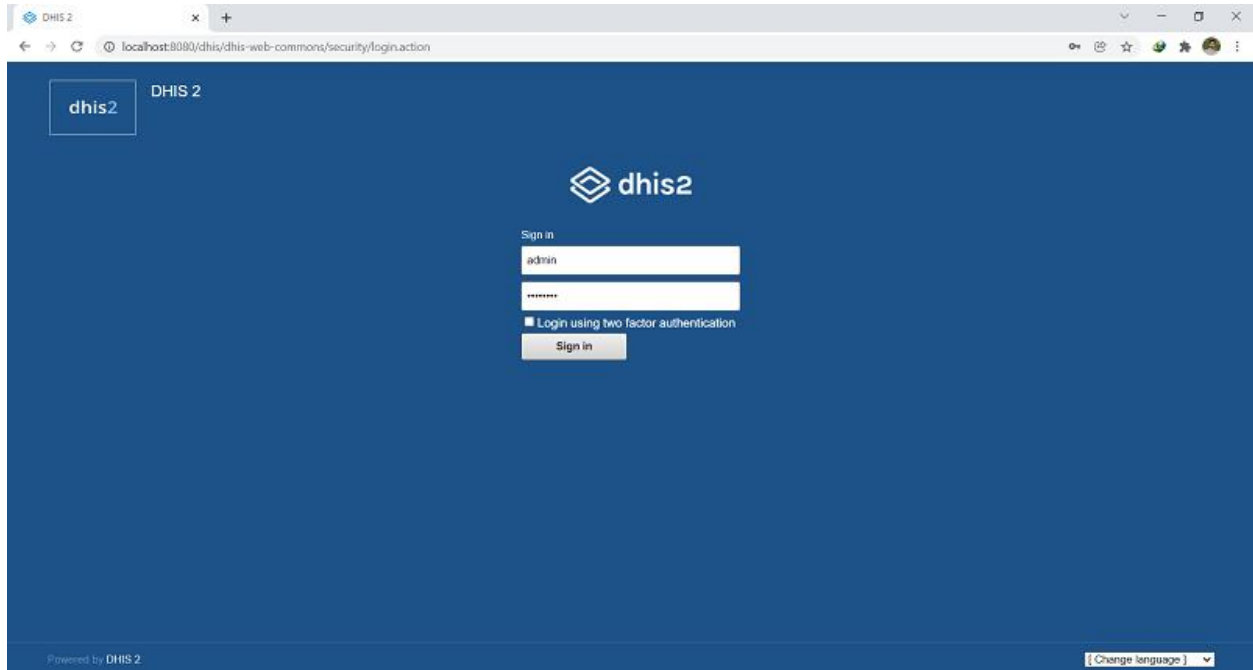
Start the Tomcat:



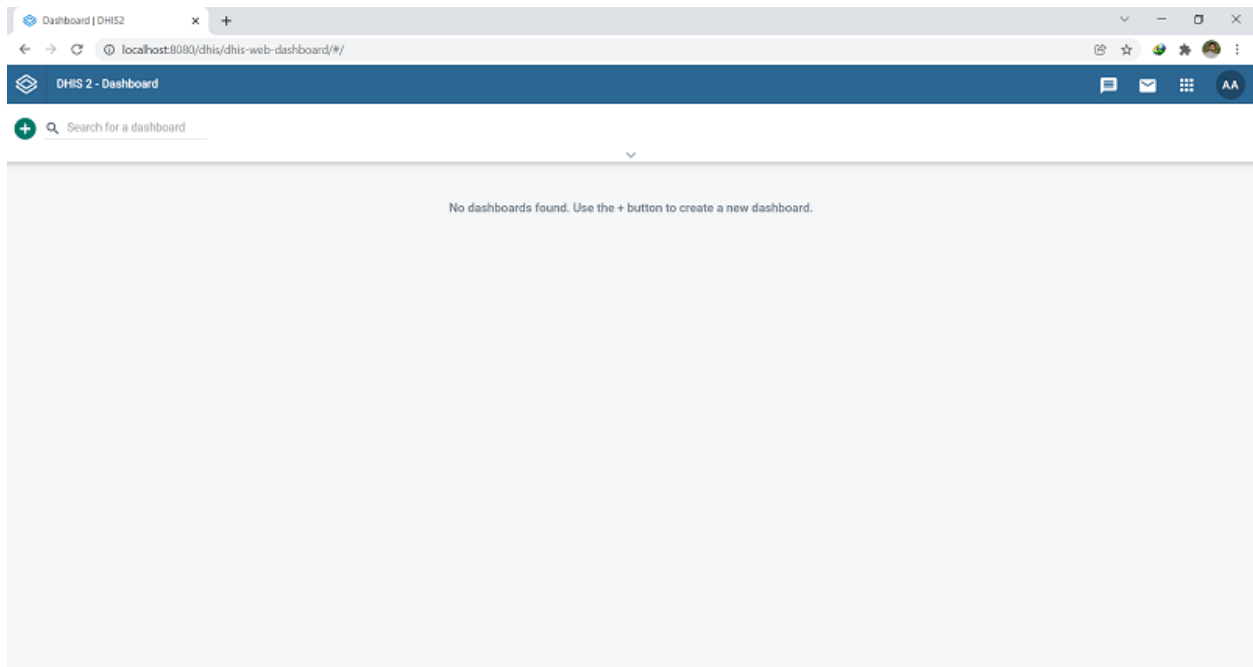
Now, open your browser and type following address:

- Localhost:8080/dhis

Huu ree ree.... It has installed successfully!



Login:
Username: admin
Password: district



Good luck!

If you need any support, don't hesitate to let me know: <https://julhas.com/>