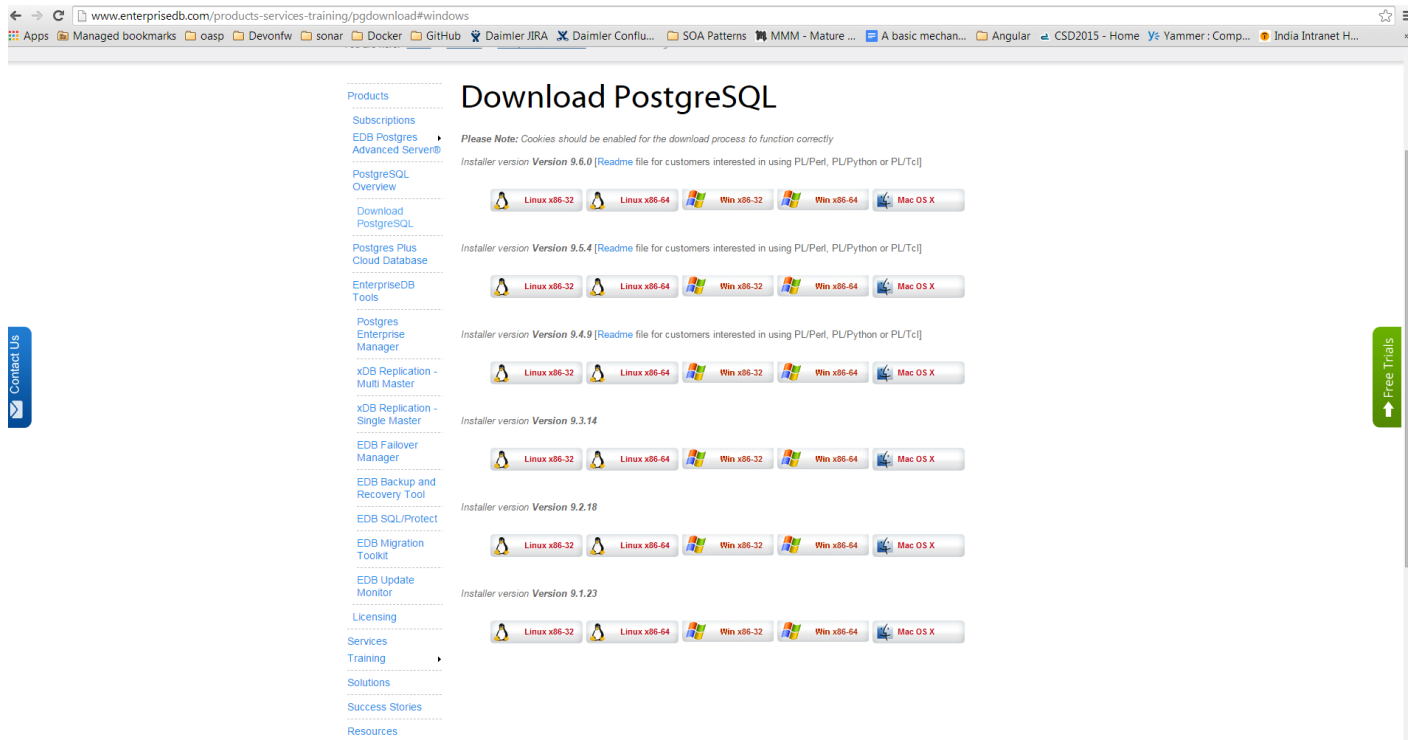# OASP4J - Guide for DBIntegration of PostGres 9.5.4

As a first step to integrate OASP4J with **PostGres 9.5.4**, **PostGres 9.5.4** has to be installed. Following are the snapshots of the configuration chosen during various stages of installation .
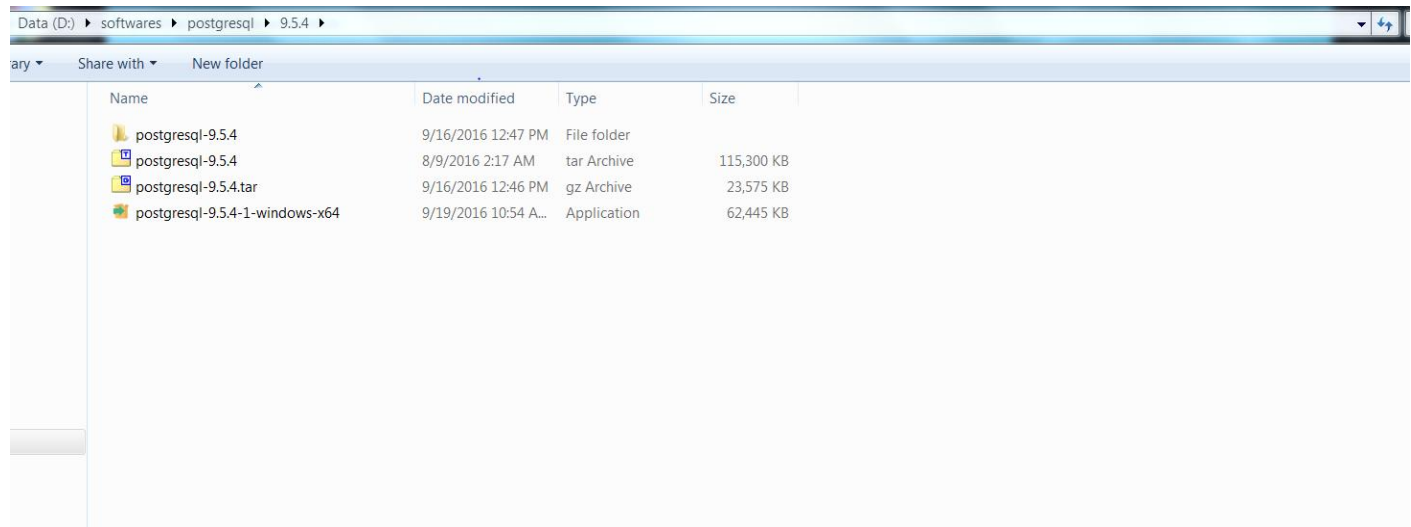
Note : One can ignore the following section if they are well versed with installation procedure of **PostGres 9.5.4**

PostGres 9.5.4 Installation and Configuration :

- Download **PostGres 9.5.4** for Windows 64 bit Operating System from http://www.enterprisedb.com/products-services-training/pgdownload#windows. Screenshot of the download page below.
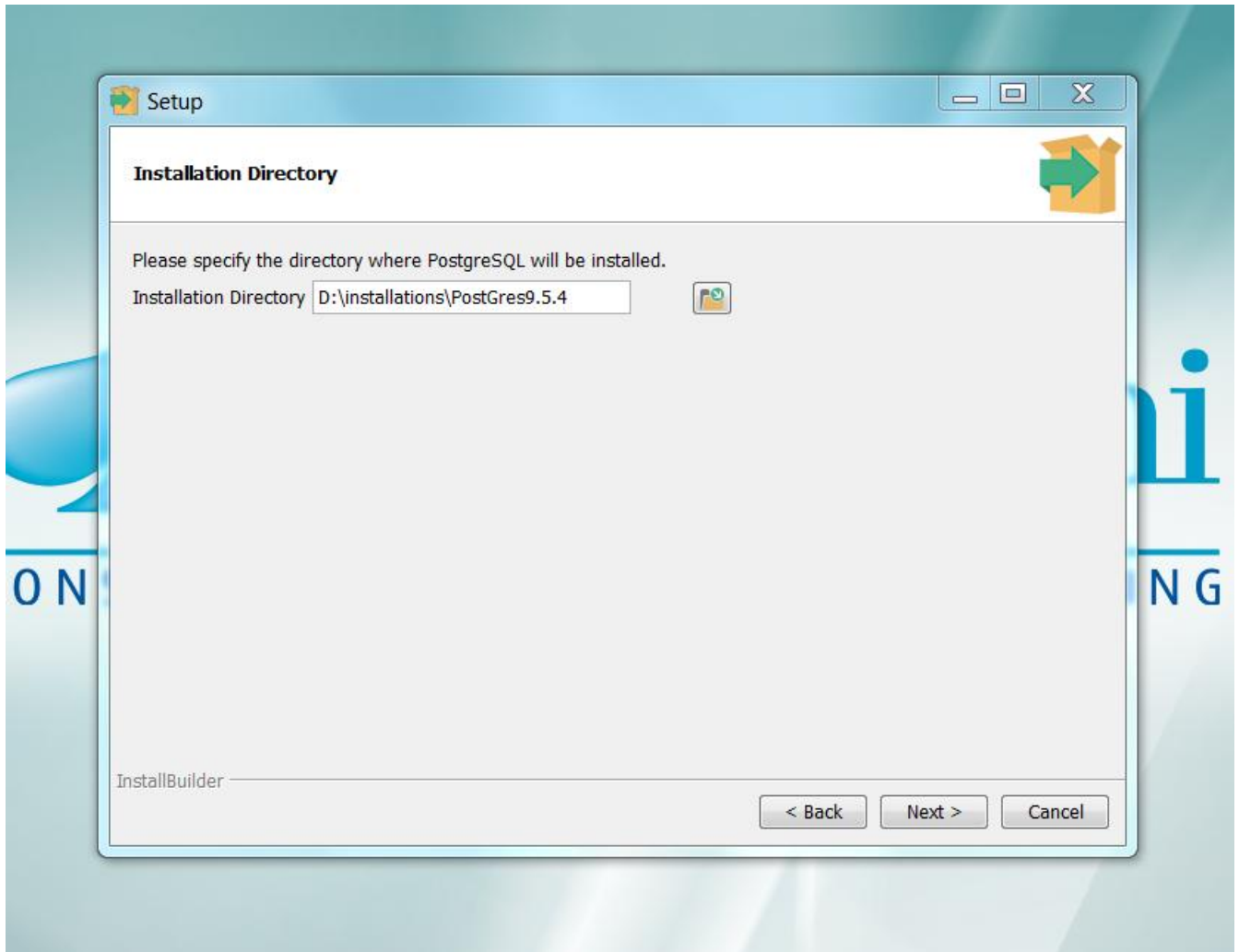

- Once installable for **PostGres 9.5.4** is downloaded , click on the installable for the installation process to start. In the screenshot below , installable is present at the end of the list . Please click on it for the installation to start
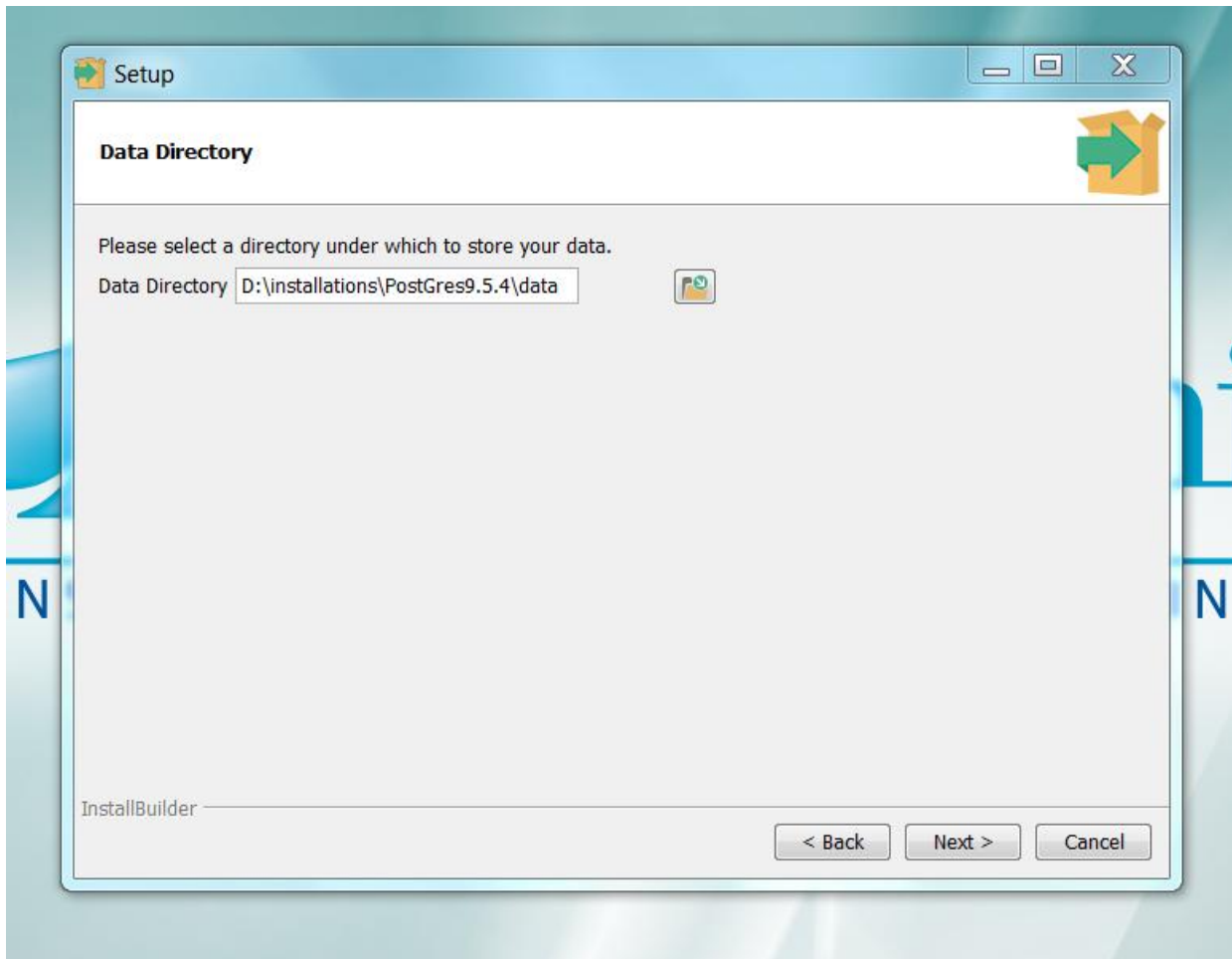
- In the screen that is displayed below , click on the '**Next'** button

- In the screen that is displayed below, select the installation directory and click on '**Next'** button.
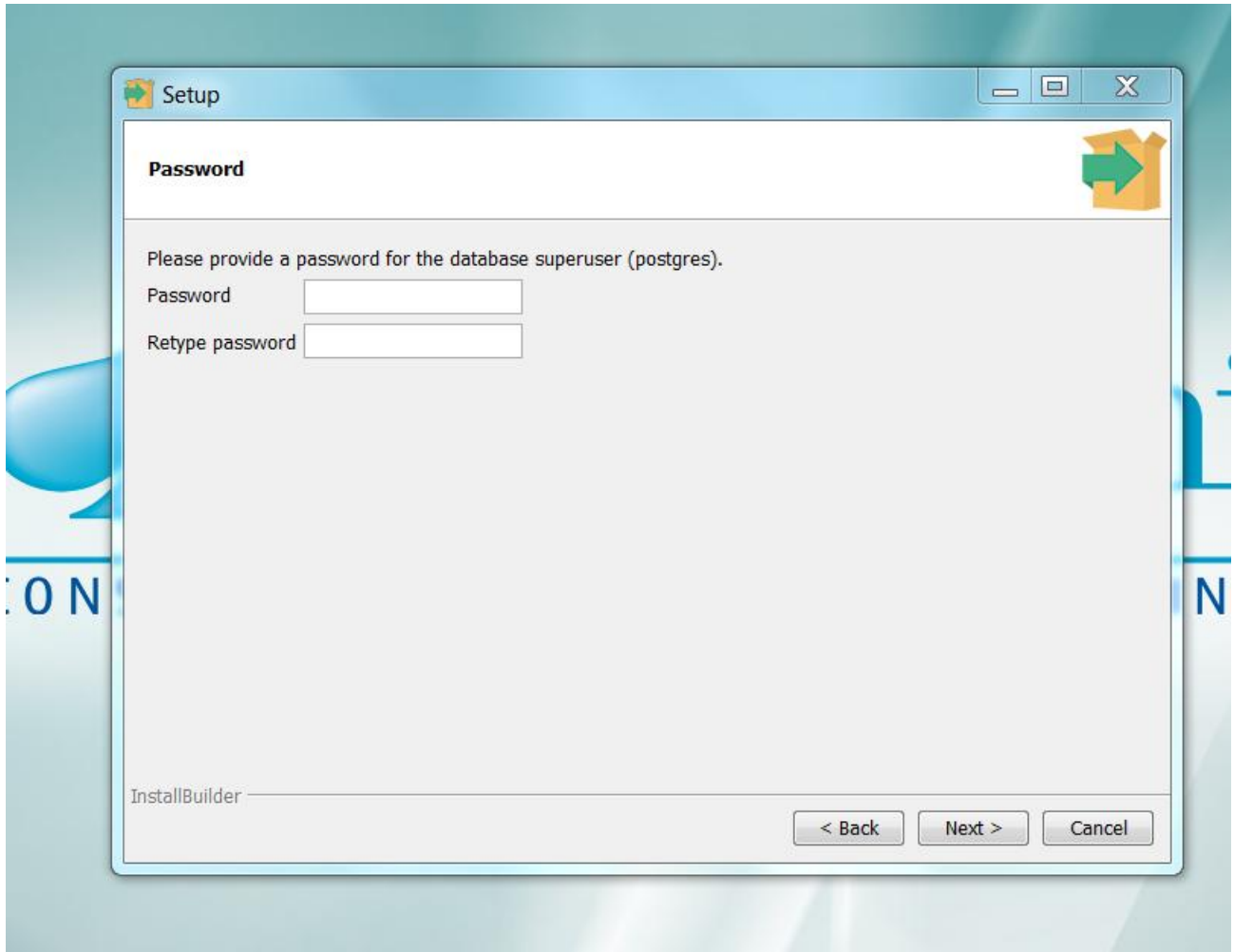
- In the screen that is displayed below, select the data directory and click on '**Next'** button.

- In the screen that is displayed below, enter the password for **PostGres** and click on '**Next**' button.

- In the screen that is displayed below, enter the port for **PostGres** and click on '**Next'** button.
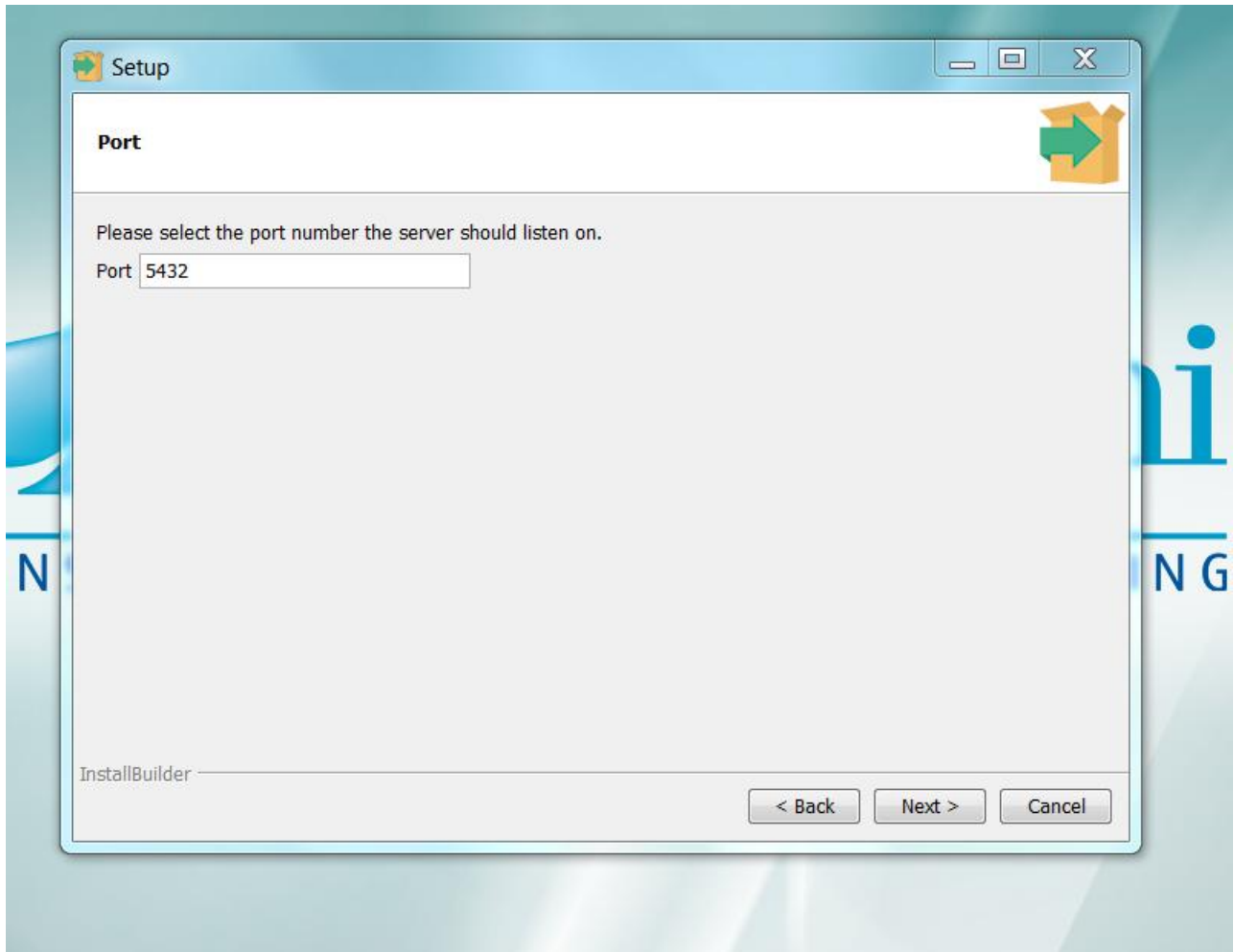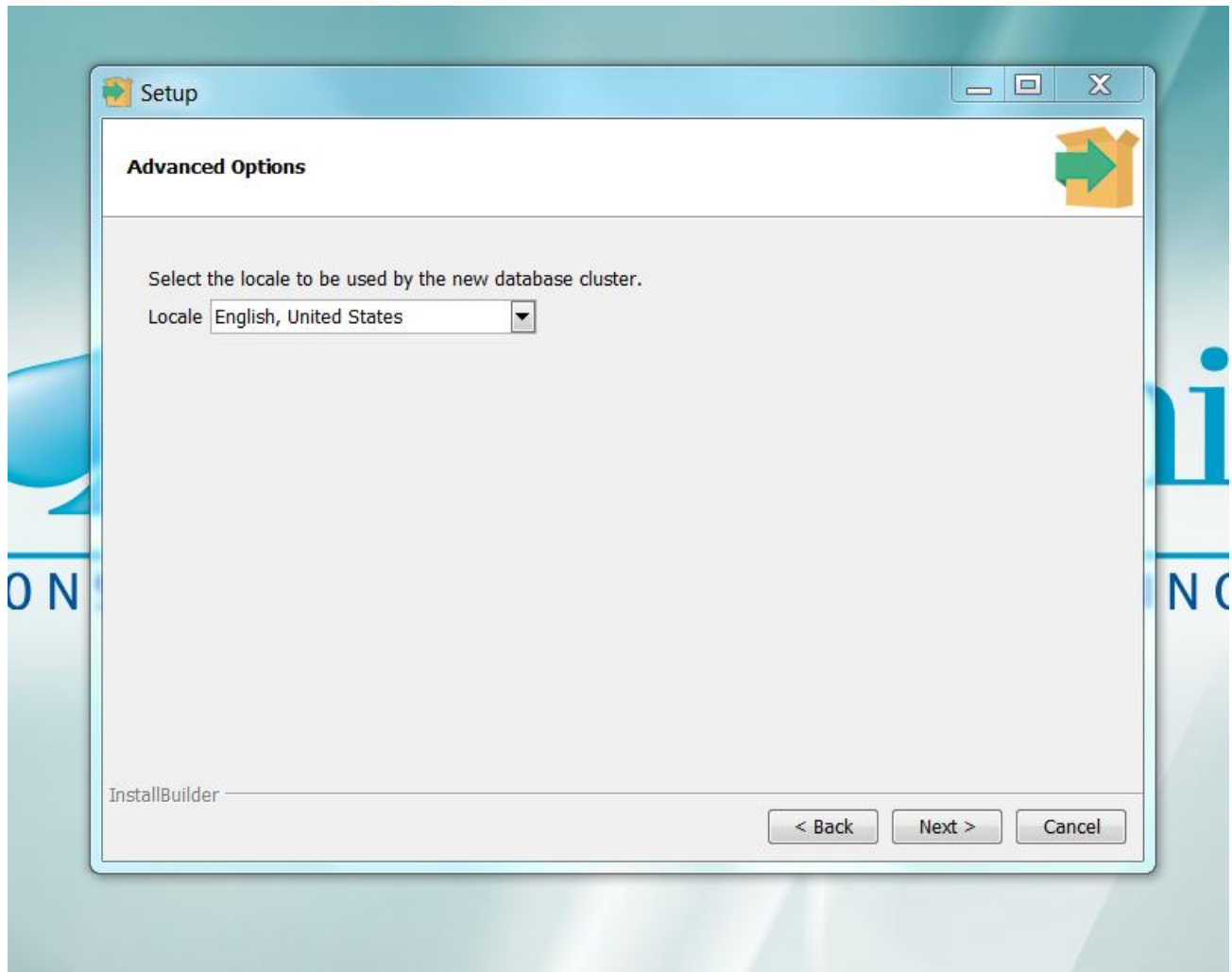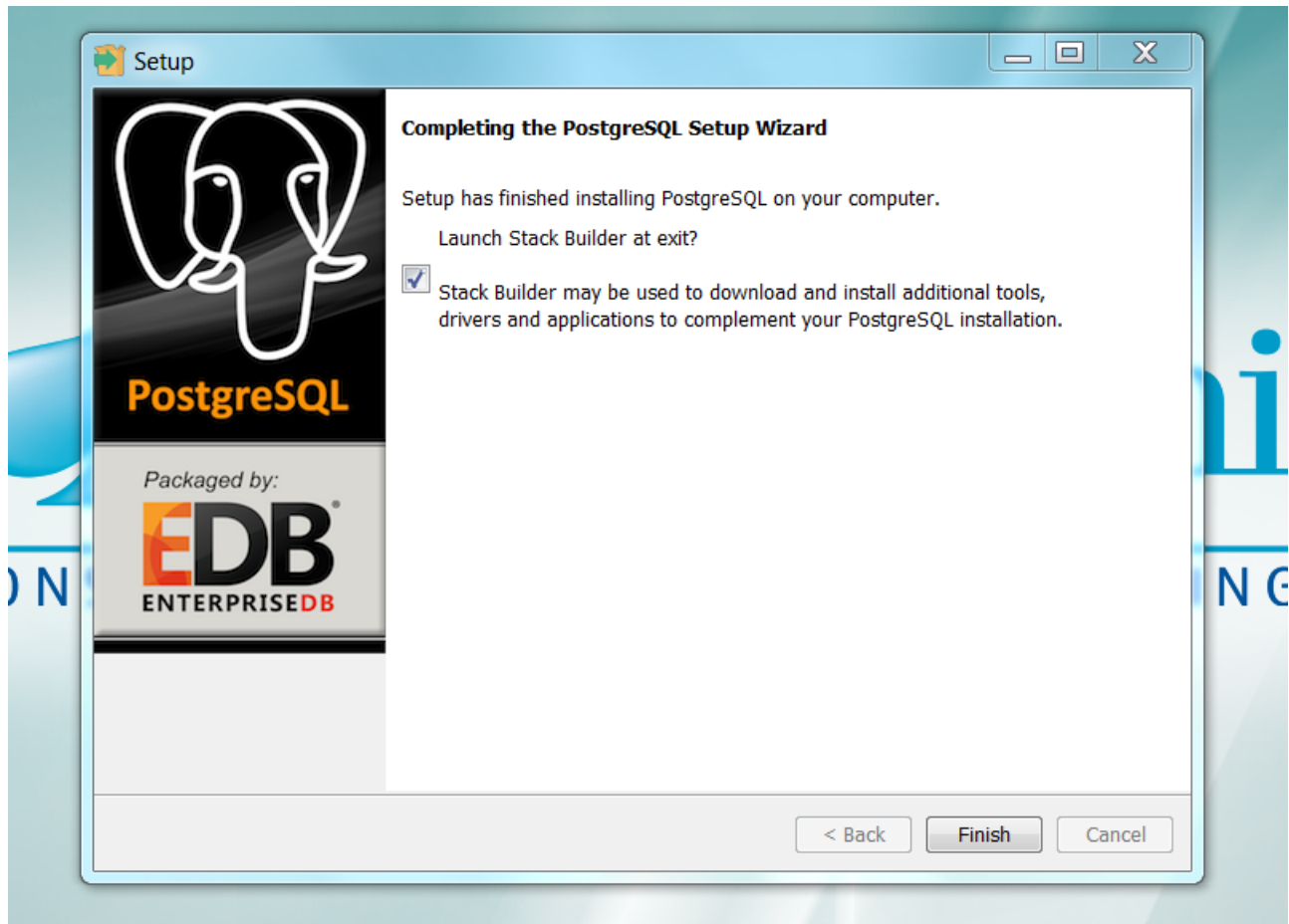
- In the screen that is displayed below, please select the Locale and click on '**Next'** button.

- In the screen that is displayed below, you can select the check box for launching the **Stack Builder** if needed.

DBIntegration – Disabling PostGres 9.5.4 and enabling h2 Database

- Comment column annotation for 'user' attribute in oasp4j-jpa-
  envers/src/main/java/io/oasp/module/jpa/dataaccess/api/AdvancedRevisionEntity.java.
  Below is the commented code for reference

```
/** @see #getUser() */
/** Remove the following line completely (Column Annotation) in case of
database other than PostGres */
//Column(name = "`user`")

private String user;
```

- Comment **Type** annotation for 'data' attribute in oasp4j-sample-
  core/src/main/java/io/oasp/gastronomy/restaurant/general/dataacess/api/BinaryObjectEnti
  ty.java

```
//@Type(type = "org.hibernate.type.BinaryType")
public Blob getData() {
```

- Comment the dependency for **PostGres 9.5.4** jdbc driver in oasp4j-sample-core/pom.xml. Commented code below

```xml
<!--
    <dependency>
        <groupId>org.postgresql</groupId>
        <artifactId>postgresql</artifactId>
        <version>9.4.1211.jre7</version>
    </dependency>
-->
```

- Rename file V0001__R001_Create_schema_pg.sql in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0001__R001_Create_schema_pg.sql.pg

- Rename file V0002__R001_Master_data_pg.sql in oasp4j-sample-core/src/main/resources/db/migration/ postgre to V0002__R001_Master_data_pg.sql.pg

- Rename file V0003__R001_Add_blob_table_and_data_pg.sql in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0003__R001_Add_blob_table_and_data_pg.sql.pg

- Rename file V0004__R001_Add_batch_tables_pg.sql in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0004__R001_Add_batch_tables_pg.sql.pg

- Uncomment the spring active profile **h2mem** and comment the spring active profile **postgre** in oasp4j-sample-core/src/main/resources/application.properties

- Uncomment the line that has spring active profile **junit** and comment the line has spring active profiles **junit** and **postgre** separated by comma in the file oasp4j-sample-core/src/test/resources/config/application.properties

- Rename file V9001_1__Delete_data_pg.sql in oasp4j-sample-core/src/ test/resources/AllTests/setup/db to V9001_1__Delete_data_pg.sql.pg

- Rename file V9901_1__Import_data_pg.sql in oasp4j-sample-core/src/ test/resources/ BillExportJobTest/setup/db to V9901_1__Import_data_pg.sql.pg

- Rename file V0001__R001_Create_schema_pg.sql in oasp4j-sample-core/src/ test/resources/db/tablemanagement to V0001__R001_Create_schema_pg.sql.pg

- Rename V0002__R001_Master_data_pg.sql in oasp4j-sample-core/src/ test/resources/db/tablemanagement to V0002__R001_Master_data_pg.sql.pg

DBIntegration – Enabling PostGres 9.5.4 and disabling h2 Database

- UnComment column annotation for 'user' attribute in oasp4j-jpa-envers/src/main/java/io/oasp/module/jpa/dataaccess/api/AdvancedRevisionEntity.java. Below is the uncommented code for reference

```
/** @see #getUser() */
/** Comment the following line completely (Column Annotation) in case of database other than PostGres 9.5.4 */
Column(name = "`user`")

private String user;
```

- UnComment **Type** annotation for 'data' attribute in oasp4j-sample-core/src/main/java/io/oasp/gastronomy/restaurant/general/dataacess/api/BinaryObjectEntity.java

```
@Type(type = "org.hibernate.type.BinaryType")
public Blob getData() {
```

- Uncomment the dependency for **PostGres 9.5.4** jdbc driver in oasp4j-sample-core/pom.xml. Dependency for **PostGres 9.5.4** below

```xml
<dependency>
        <groupId>org.postgresql</groupId>
        <artifactId>postgresql</artifactId>
        <version>9.4.1211.jre7</version>
</dependency>
```

- In the file oasp4j-sample-core/src/main/resources/config/**application-postgre**.properties, please change the value of property 'spring.datasource.url'. Hostname, port and databaseName has to be changed accordingly. Change the values of the properties **'spring.datasource.username'** and '**spring.datasource.password**' as well accordingly.

- Rename file V0001__R001_Create_schema_pg.sql.pg in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0001__R001_Create_schema_pg.sql

- Rename file V0002__R001_Master_data_pg.sql.pg in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0002__R001_Master_data_pg.sql

- Rename file V0003__R001_Add_blob_table_and_data_pg.sql.pg in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0003__R001_Add_blob_table_and_data_pg.sql

- Rename file V0004__R001_Add_batch_tables_pg.sql.pg

in oasp4j-sample-core/src/main/resources/db/migration/postgre to V0004__R001_Add_batch_tables_pg.sql

- Comment the spring active profile **h2mem** and Uncomment the spring active profile **postgre** in oasp4j-sample-core/src/main/resources/application.properties

- Rename file V9001_1__Delete_data.sql in oasp4j-sample-core/src/ test/resources/AllTests/setup/db/ to V9001_1__Delete_data.sql.h2

- Rename file V9901_1__Import_data.sql in oasp4j-sample-core/src/ test/resources/ BillExportJobTest/setup/db to V9901_1__Import_data.sql.h2

- Rename file V0001__R001_Create_schema.sql in oasp4j-sample-core/src/ test/resources/db/tablemanagement to V0001__R001_Create_schema.sql.h2

- Rename V0002__R001_Master_data.sql in oasp4j-sample-core/src/ test/resources/db/tablemanagement to V0002__R001_Master_data.sql.h2

  After following above instructions, make sure JUNITs are successful by running the command '**mvn clean install**' for oasp4j project.

Running sample application with Angular JS Client:

- Follow steps mentioned in https://github.com/oasp/oasp4js/wiki/tutorial-jspacking-angular-client .

Running sample application with Sencha Client:

- Follow steps mentioned in https://github.com/devonfw/devon/wiki/getting-started-deployment-on-tomcat .