

Java Reactive Database Driver for Db2

Installation Guide

Version 1.0.0

5-15-2021

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1. Getting the reactive driver

The Java Reactive Database Driver is shipped as part of DB2 DS Driver Package. Inside the DB2 DS Driver installation directory look for the zip file named `r2dbc_db2.zip`. Unzip this file in a directory. This directory is referred to as installed directory in this document.

2. Setting the environment

If you are using Maven project look for `pom.xml` file in the installed directory. This file defines all the dependencies used by this driver. You can copy paste the dependencies definitions to your project file. Then add the reactive driver jar file in the `lib` folder to your `CLASSPATH`. This completes the setup of your environment for the reactive driver.

If you are not using Maven project continue with the rest of the section.

The installed directory has `lib` and `extlib` subdirectories. The jar file in the `lib` directory contains the reactive driver.

Install Maven from <https://maven.apache.org>. Then invoke `get_extlib.bat` script to download all the depending jars. This script uses the Maven utility to download the required jars to the `extlib` folder.

All the jars in the `extlib` are the dependencies of the reactive driver. Add all the jars in these two directories `lib` and `extlib` to your `CLASSPATH`. There is a helper script called `env.bat` available in the installed directory. Invoking this script will add all the required jars to your `CLASSPATH`.

If your using Linux/Unix system, there are corresponding `.sh` scripts provided in the same location as `.bat` scripts. To set the `CLASSPATH` source the `env.sh` script (`. ./env.sh`).

3. Checking the driver version

You can check the version of this driver using the following command:

```
C:\> java com.ibm.db2.r2dbc.Version
Java Reactive Database Driver for DB2. Version 1.0.0-SNAPSHOT   Build Time
2021-06-28 04:15
```

The above will also validate if the `CLASSPATH` is set correctly.

4. Running samples

The `samples` directory contains the sample shipped with the driver. It has the code to show the usage of the reactive driver. To run the sample, follow the steps listed below.

- Update the `config.properties` file for the login credentials of the db2 database you want to connect to.

- When using Kerberos Security mechanism, specifying userid and password are optional, if you are logged in already in the Kerberos.
- Execute the build.bat script to build the sample.
- Execute the run.bat script to run the sample.

5. Running unit tests

The `tests` directory contains the unit tests shipped with the driver. You can run all the unit tests to make sure the environment is set correctly, and the driver is working as expected. The tests can also serve as code sample for each of the features implemented in the driver. To run the unit tests, follow the steps listed below.

- Update the `config.properties` file for the login credentials of the db2 database you want to connect to.
- Use the `type` property to specify whether you are connecting to zOS or LUW database server.
- Specify your userid, even if you are using Kerberos Security mechanism. The testcases use the userid in some of their SQL queries and hence it is required for the tests to run.
- Execute the build.bat script to build the sample.
- Execute the run.bat script to run the sample.