

GUIDELINE

CONFIG POSTGRESQL DATASOURCE IN WILDFLY

Author: *VAMOS Team*

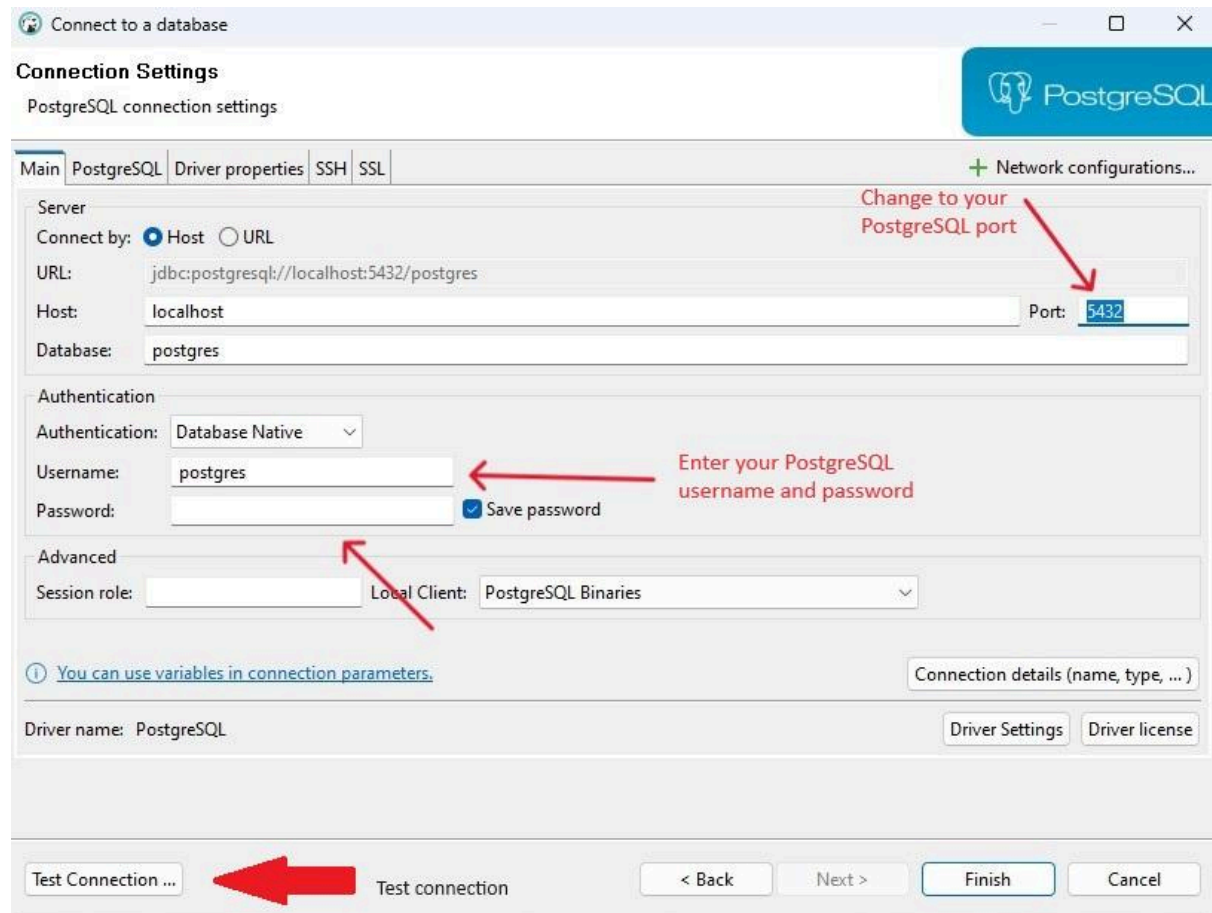
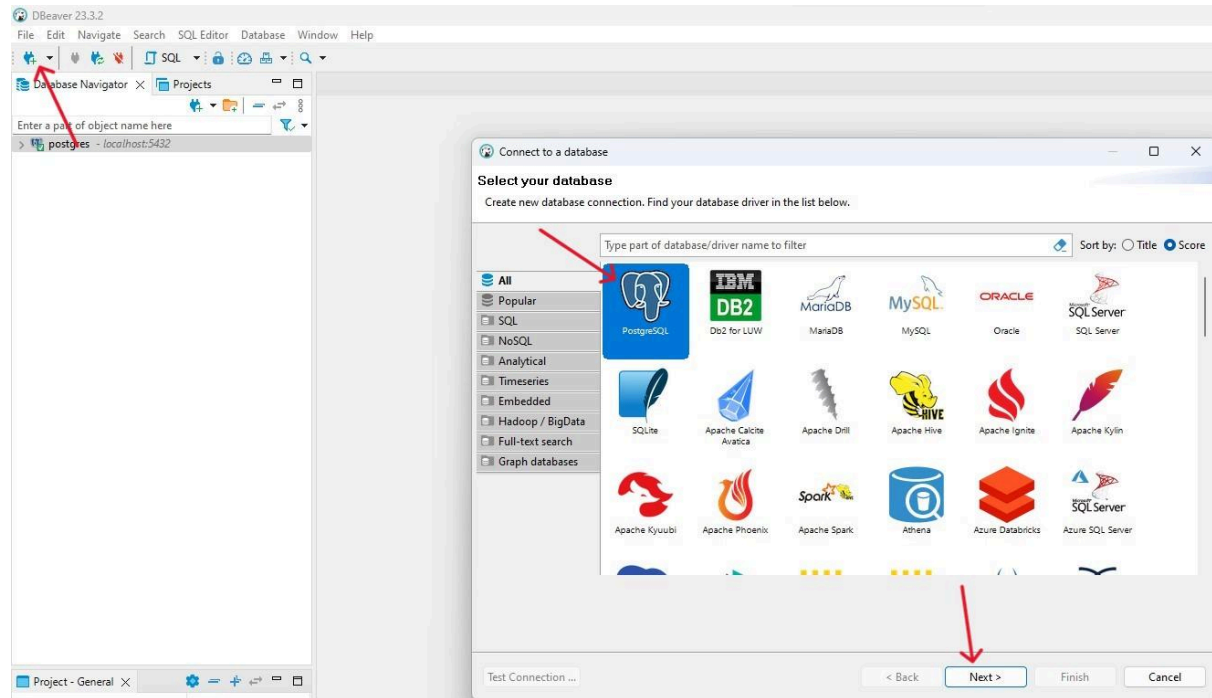
Date: January 15, 2024

I. Create local database:

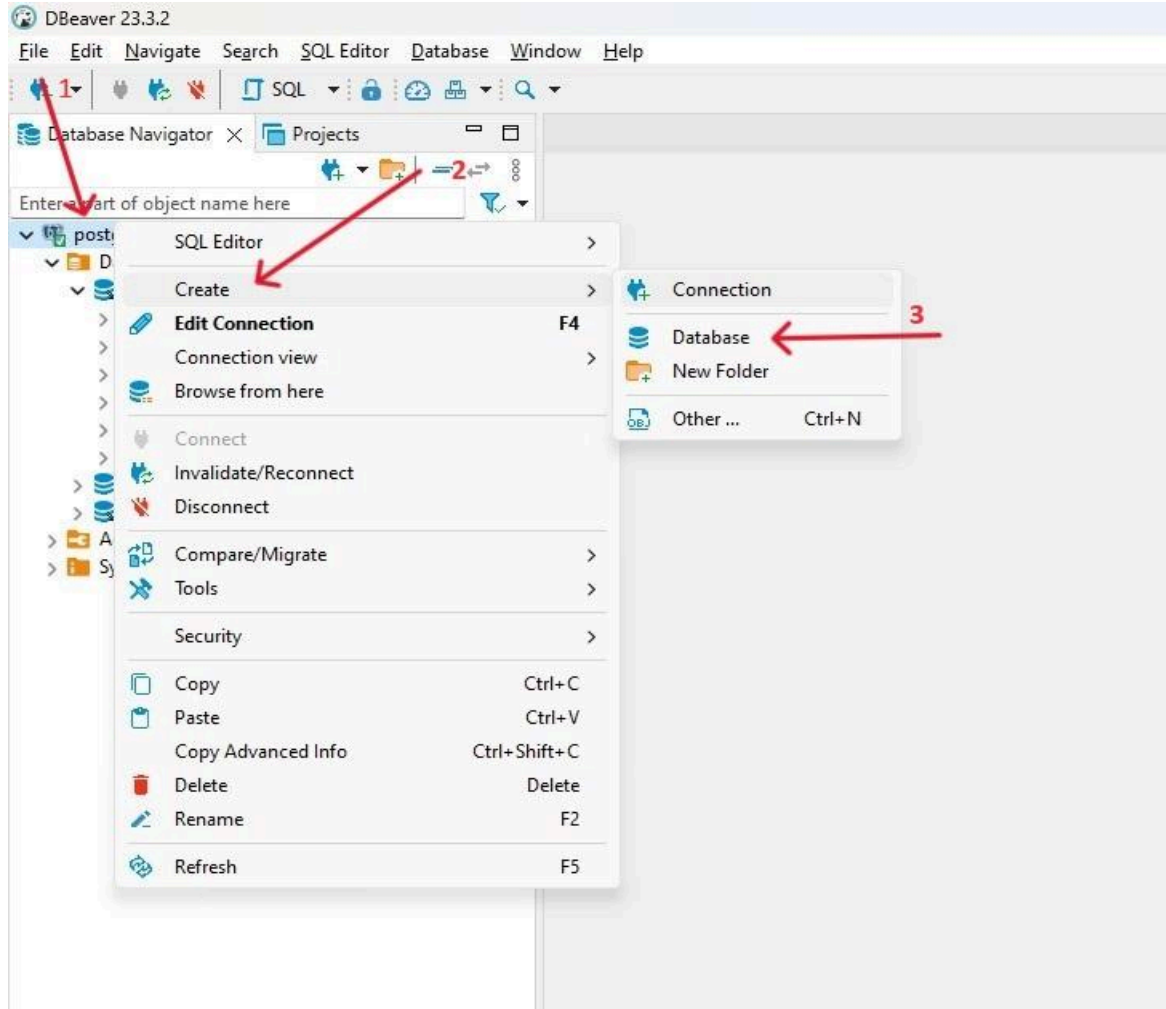
1. Pull and put PostgreSQL in a container:

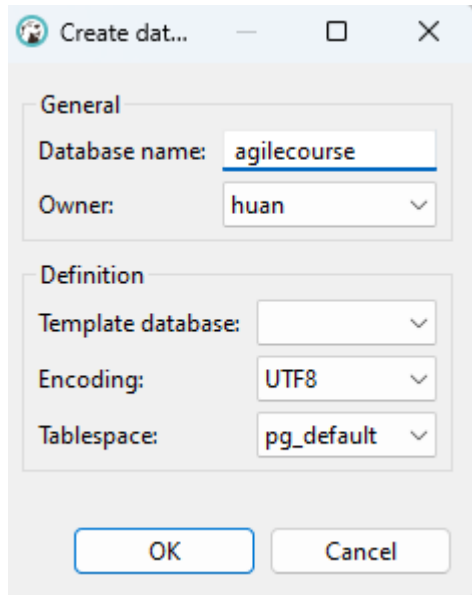
```
docker run --name postgres_container -e POSTGRES_USER=___ -e  
POSTGRES_PASSWORD=___ -p 5432:5432 -d postgres:14
```

2. Open "Dbeaver":
 - a. Create a connection to PostgreSQL



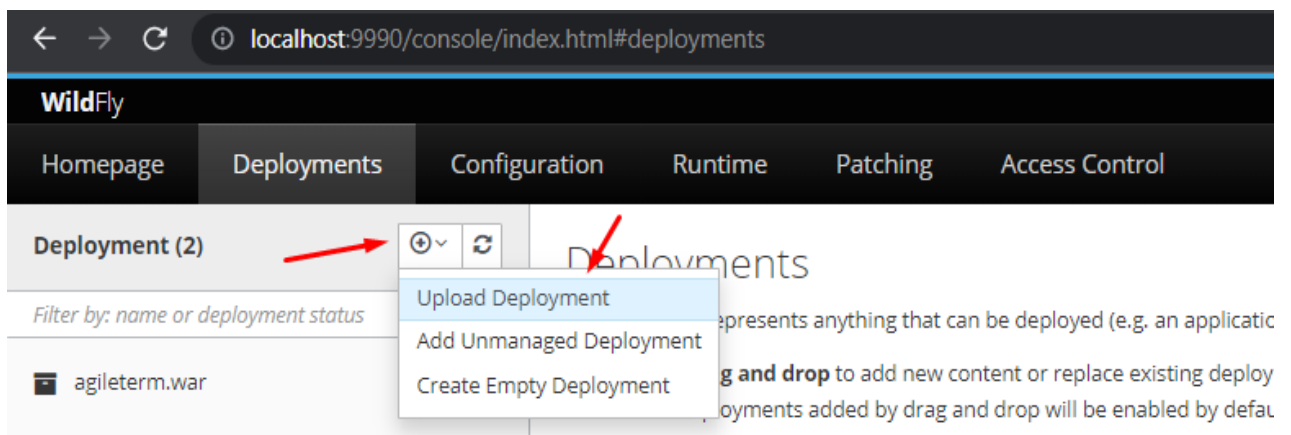
b. Create database name **“agile-course”** and get the URL for the database





II. Connect WildFly with PostgreSQL:

1. Download the latest JDBC PostgreSQL Driver that suits Java 8 and above (<https://jdbc.postgresql.org/download/postgresql-42.7.1.jar>)
2. Run Wildfly with the “**standalone.bat**” file in the bin folder or in your IntelliJ
3. Go to “**http://localhost:9990/**” and login with your account
4. Go to **Deployments** → **Upload Deployment**



5. Upload the “jar” file you just downloaded

Add Deployment

Upload Deployment

Specify Names

1

2

Choose a file or drag it here

Click and upload (or drag)
your PostgreSQL JDBC 42.7.1
here

Cancel

< Back

Next >

Add Deployment



Upload Deployment

Specify Names

1

2

Help

Name postgresql-42.7.1.jar

Runtime Name postgresql-42.7.1.jar

Enabled

ON

Required fields are marked with *

Cancel

< Back

Finish


Add Deployment ✕

Upload Deployment

Specify Names

1

2



Upload successful

postgresql-42.7.1.jar has been successfully uploaded to the content repository.

View Deployment

Cancel

< Back

Close

6. Check if PostgreSQL is deployed:

Deployment (2) ⊕ ↺


Filter by: name or deployment status

agilecourse.war

postgresql-42.7.1.jar View ⌵

Your JDBC should be deployed

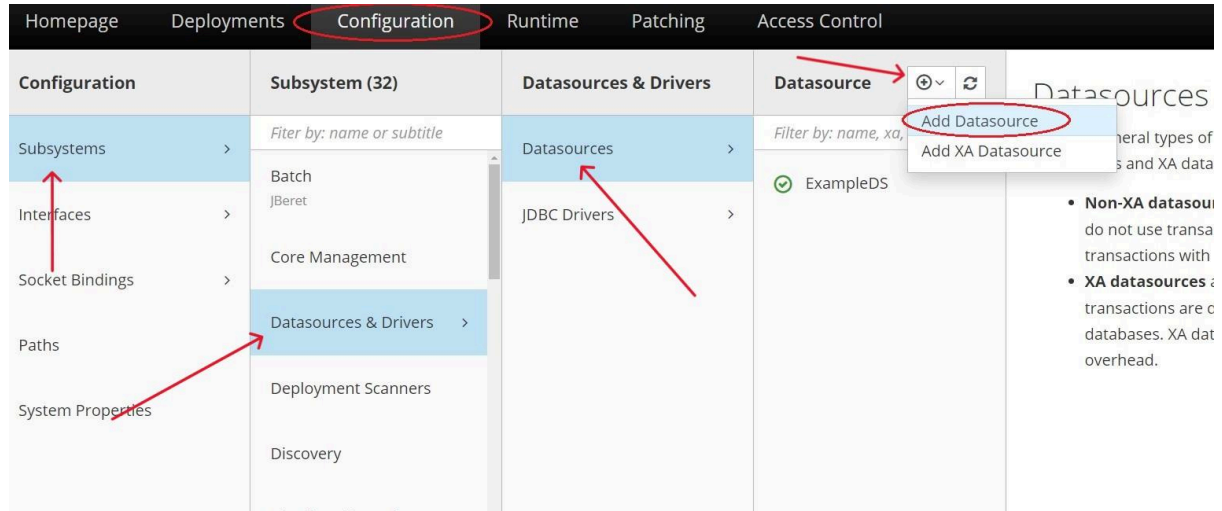
postgresql-42.7.1.jar

 The deployment **postgresql-42.7.1.jar** is enabled and active. [Disable](#)

Main Attributes

Name:	postgresql-42.7.1.jar
Runtime Name:	postgresql-42.7.1.jar
Hash:	66098cc4f7dca6f7f5b4b847c5cc8699fc079e5b
Enabled, Managed, Exploded:	✓ ✓ ✕
Status:	OK
Last enabled at:	1/14/24, 11:43 AM
Last disabled at:	n/a

7. Add a new data source to Wildfly: **Configuration** → **Subsystems** → **Datasources & Drivers** → **Datasources** → “+” → **Add Datasource**



Add Datasource



Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

1

2

3

4

5

6

Choose one of the predefined templates to quickly add a datasource or choose "Custom" to specify your own settings.

- ☐ Custom
- ☐ H2
- ☒ PostgreSQL
- ☐ MySQL
- ☐ MariaDB
- ☐ Oracle
- ☐ Microsoft SQLServer
- ☐ IBM DB2
- ☐ Sybase

Cancel

< Back

Next >

Add Datasource



Help

Name

JNDI Name *

Required fields are marked with *

JNDI name must match with the name in the
persistence.xml file in the Agile Course project

Cancel

< Back

Next >

Add Datasource



Help

Driver Name *	<input type="text" value="*"/>
Driver Module Name	<input type="text" value="h2"/>
Driver Class Name	<input type="text" value="org.postgresql.Driver"/>

Required fields are marked with *

Cancel

< Back

Next >

Add Datasource



Help
Enter username
and password
that you setup
for PostgreSQL

Connection URL	jdbc:postgresql://localhost:5432/agilecourse
User Name
Password
Security Domain	
Credential Reference Store	
Credential Reference Alias	
Credential Reference Clear T...	
Credential Reference Type	

This must match your database
URL in Dbeaver. *Note: "5432" is
my postgresSQL port, you should
change it to your

Cancel < Back Next >

Add Datasource



On this page you can test the connection of your datasource.

Please note that testing the connection changes the semantics of this wizard:

- If you press **Test Connection** for the **first time**, the datasource is **created in advance**.
- If you **go back** and change settings, this will **modify** the newly created datasource. Please note that you cannot change the name and JNDI bindings once the datasource has been created.
- If you **cancel** the wizard, the datasource will be **removed** again. This might require a reload of the server.

If you choose to continue without testing the connection, the datasource will be created after finishing the wizard.

Test Connection

Cancel

< Back

Next >

Add Datasource



Choose Template

1

Attributes

2

JDBC Driver

3

Connection

4

Test Connection

5

Review

6



Test Connection Successful

Successfully tested connection for datasource **AgileCourseDS**.

Cancel

< Back

Next >

Add Datasource

Choose Template
Attributes
JDBC Driver
Connection
Test Connection
Review

1
2
3
4
5
6

Help

Name
AgileCourseDS

JNDI Name
java:/AgileCourseDS

Connection URL
jdbc:postgresql://localhost:5432/agile-course

Driver Name
postgresql-42.7.1.jar

User Name
.....

Password
.....

Credential Reference

Cancel
Back
Finish

8. After you have done all the steps, your data source should appear.

Homepage
Deployments
Configuration
Runtime
Patching
Access Control

Configuration
Subsystems
Interfaces
Socket Bindings
Paths
System Properties

Subsystem (32)
Batch
jBeret
Core Management
Databases & Drivers
Deployment Scanners
Discovery
Distributable Web
EE
EJB
Elytron Old Client
Health

Databases & Drivers
Databases
JDBC Drivers

Databases
Filter by: name, xa, .../disabled, deployn
AgileCourseDS
ExampleDS
View

AgileCourseDS
Datasource
The datasource AgileCourseDS is enabled. Disable
Main Attributes
JNDI Name: java:/AgileCourseDS
Driver Name: postgresql-42.7.1.jar
Connection URL: jdbc:postgresql://localhost:5432/agile-course
Enabled: true
Statistics Enabled: false