

Run the docker Compose file below to stand up your Postgres database and the PgAdmin tool

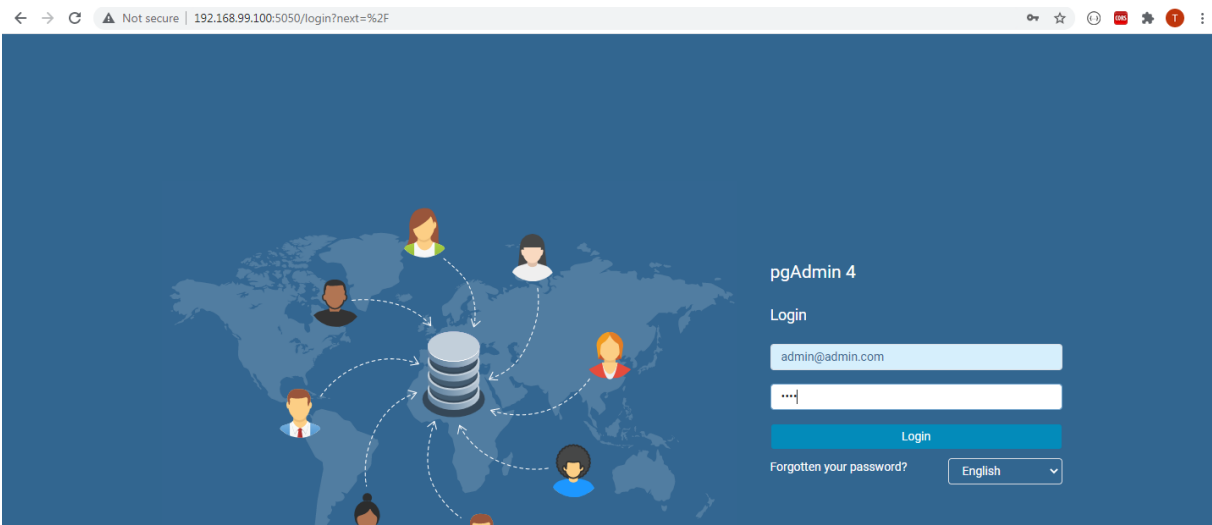
```
MINGW64/C:/Users/Elite8300/Documents/CNRefactory/ACNMercury/PostgressPgAdmin
$ docker-compose up
Creating network "postgresspgadmin_default" with the default driver
Creating pgadmin4_container ... done
Creating pg_container ... done
Attaching to pgadmin4_container, pg_container
pg_container | The files belonging to this database system will be owned by user
pg_container | "postgres".
pg_container | This user must also own the server process.
pg_container | The database cluster will be initialized with locale "en_US.utf8".
pg_container | The default database encoding has accordingly been set to "UTF8".
pg_container | The default text search configuration will be set to "english".
pg_container | Data page checksums are disabled.
pg_container | fixing permissions on existing directory /var/lib/postgresql/data
... ok
pg_container | creating subdirectories ... ok
pg_container | selecting dynamic shared memory implementation ... posix
pg_container | selecting default max_connections ... 100
pg_container | selecting default shared_buffers ... 128MB
pg_container | selecting default time zone ... Etc/UTC
pg_container | creating configuration files ... ok
pg_container | running bootstrap script ... ok

C:\Users\Elite8300\Documents\CNRefactory\ACNMercury\PostgressPgAdmin\docker-compose.yml (PostgressPgAdmin)
FOLDERS
PostgressPgAdmin
docker-compose.yml
1 version: '3.3'
2 services:
3   db:
4     container_name: pg_container
5     image: postgres
6     restart: always
7     environment:
8       POSTGRES_USER: root
9       POSTGRES_PASSWORD: root
10      POSTGRES_DB: test_db
11     ports:
12       - "5432:5432"
13   pgadmin:
14     container_name: pgadmin4_container
15     image: dpage/pgadmin4
16     restart: always
17     environment:
18       PGADMIN_DEFAULT_EMAIL: admin@admin.com
19       PGADMIN_DEFAULT_PASSWORD: root
20     ports:
21       - "8080:80"
```

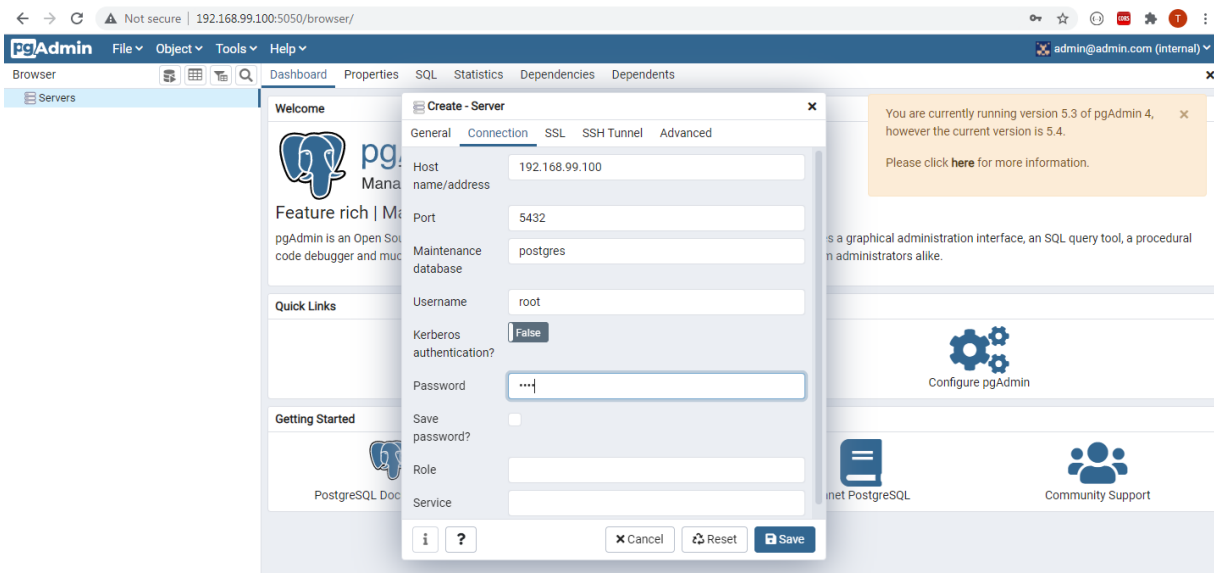
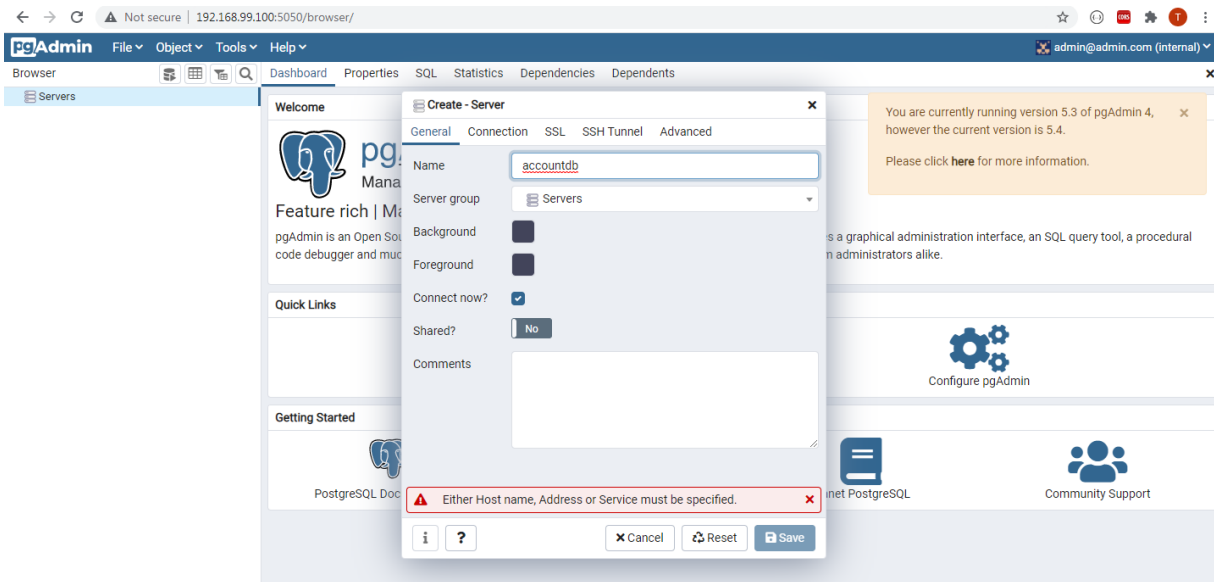
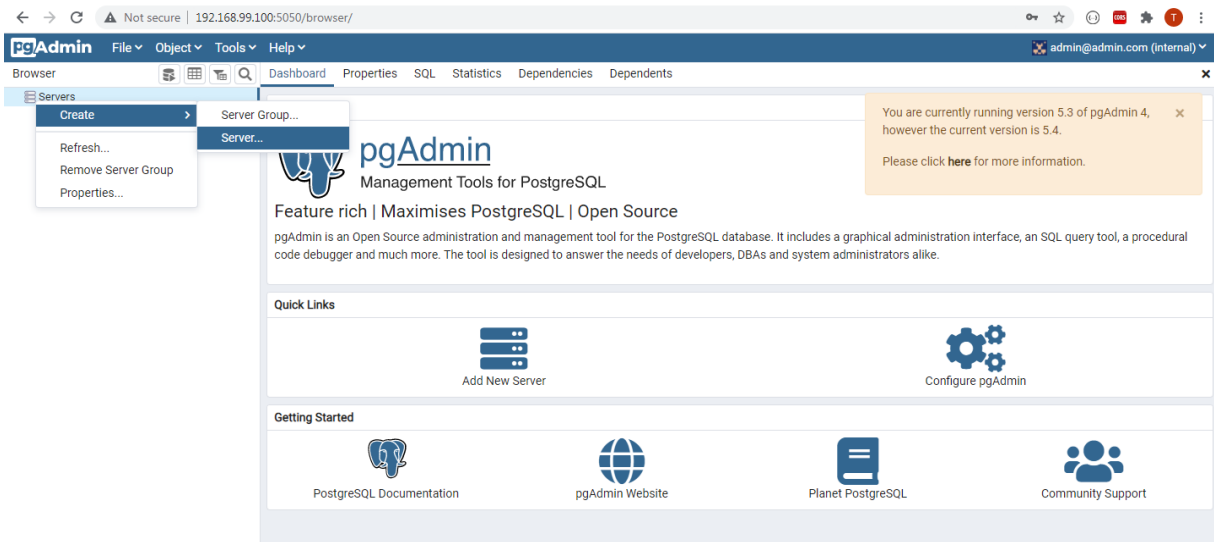
```
MINGW64/C:/Users/Elite8300/Documents/CNRefactory/ACNMercury/PostgressPgAdmin
pgadmin4_container | Traceback (most recent call last):
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask/app.py", line 1948, in full_dispatch_request
pgadmin4_container | rv = self.preprocess_request()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask/app.py", line 2242, in preprocess_request
pgadmin4_container | rv = func()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 224, in csrf_protect
pgadmin4_container | self._protect()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 259, in _protect
pgadmin4_container | self._error_response(e.args[0])
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 302, in _error_response
pgadmin4_container | raise CSRFError(reason)
pgadmin4_container | flask_wtf.csrf.CSRFError: 400 Bad Request: The CSRF session token is missing.
pgadmin4_container | During handling of the above exception, another exception occurred:
pgadmin4_container | Traceback (most recent call last):
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask/app.py", line 1948, in full_dispatch_request
pgadmin4_container | rv = self.preprocess_request()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask/app.py", line 2242, in preprocess_request
pgadmin4_container | rv = func()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 224, in csrf_protect
pgadmin4_container | self._protect()
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 259, in _protect
pgadmin4_container | self._error_response(e.args[0])
pgadmin4_container | File "/venv/lib/python3.8/site-packages/flask_wtf/csrf.py", line 302, in _error_response
pgadmin4_container | raise CSRFError(reason)
pgadmin4_container | flask_wtf.csrf.CSRFError: 400 Bad Request: The CSRF session token is missing.

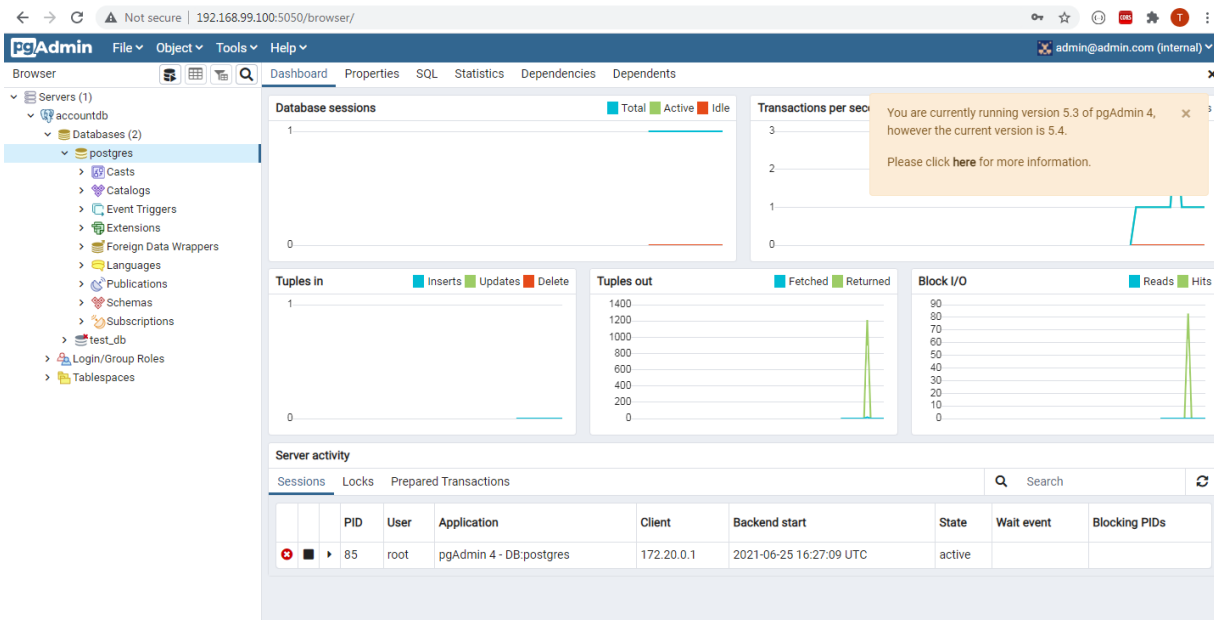
e/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:40 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:41 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:42 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:43 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:44 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:45 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:46 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:47 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:48 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:49 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:50 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:51 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
pgadmin4_container | :ffff:192.168.99.1 - - [25/Jun/2021:16:22:52 +0000] "GET /dashboard/dashboard_stats/1/16384?chart_names=session_stats,tps_stats,ti_stats,o_stats,bio_stats HTTP/1.1" 200 246 "http://192.168.99.100:5050/browser/" "Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36"
```

Log into the PgAdmin tool and connect to Postgres database

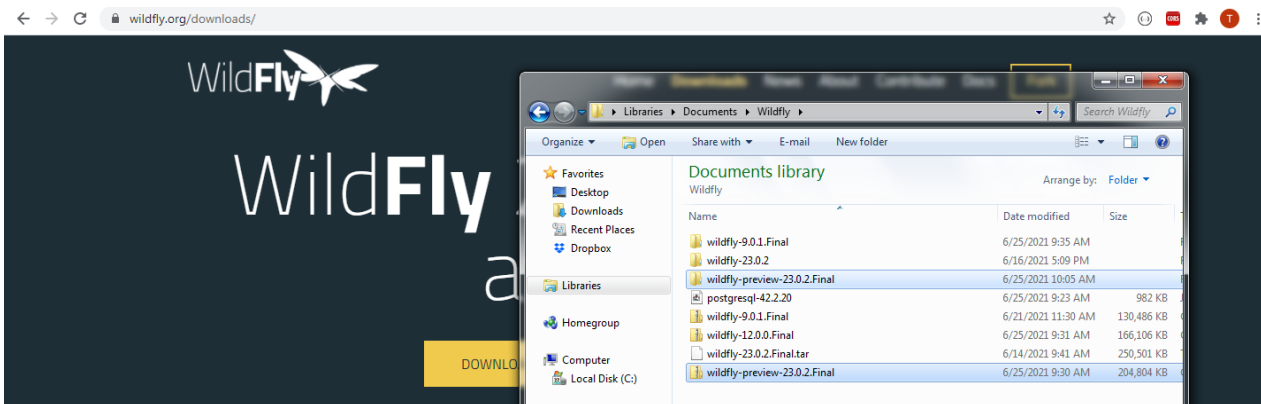


Connect to the Postgres database

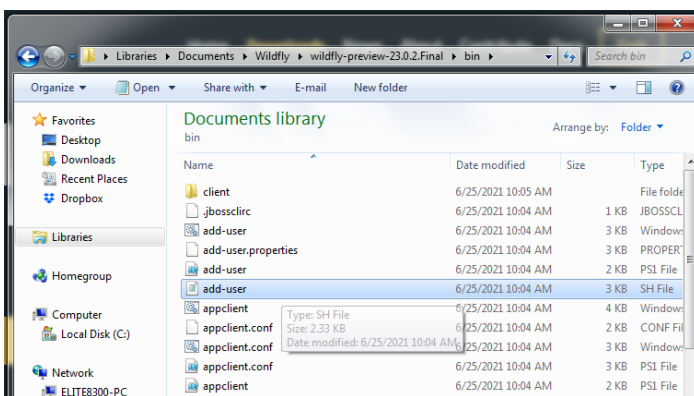




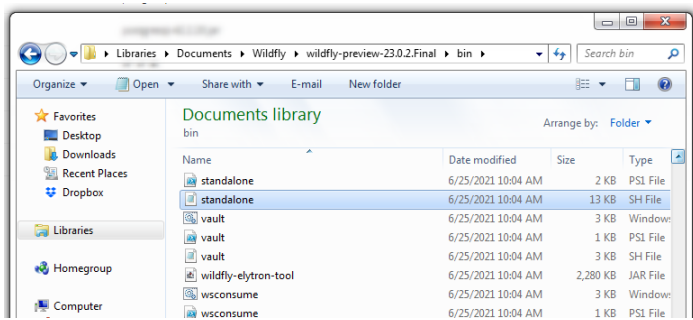
Next, download the Wildfly server version to use



Add a user by running the add-user.sh file, add the user with username/password of **admin/admin1+**



Run the Wildfly Server using the **standalone.sh** file within the bin folder



Download the PostgreSQL Driver .JAR file to use from <https://jdbc.postgresql.org/download.html>

Version	JDBC 4.0	JDBC 4.1	JDBC 4.2	Source
42.2.22	<a href="#">42.2.22 JDBC 4.0</a>	<a href="#">42.2.22 JDBC 4.1</a>	<a href="#">42.2.22 JDBC 4.2</a>	<a href="#">42.2.22 JDBC Source</a>
42.2.21	<a href="#">42.2.21 JDBC 4.0</a>	<a href="#">42.2.21 JDBC 4.1</a>	<a href="#">42.2.21 JDBC 4.2</a>	<a href="#">42.2.21 JDBC Source</a>
42.2.20	<a href="#">42.2.20 JDBC 4.0</a>	<a href="#">42.2.20 JDBC 4.1</a>	<a href="#">42.2.20 JDBC 4.2</a>	<a href="#">42.2.20 JDBC Source</a>
42.2.19	<a href="#">42.2.19 JDBC 4.0</a>	<a href="#">42.2.19 JDBC 4.1</a>	<a href="#">42.2.19 JDBC 4.2</a>	<a href="#">42.2.19 JDBC Source</a>
42.2.18	<a href="#">42.2.18 JDBC 4.0</a>	<a href="#">42.2.18 JDBC 4.1</a>	<a href="#">42.2.18 JDBC 4.2</a>	<a href="#">42.2.18 JDBC Source</a>
42.2.17	<a href="#">42.2.17 JDBC 4.0</a>	<a href="#">42.2.17 JDBC 4.1</a>	<a href="#">42.2.17 JDBC 4.2</a>	<a href="#">42.2.17 JDBC Source</a>

Upload the PostgreSQL Driver .JAR file into the Deployments section in Wildfly

HAL Management Console

Deployment (1)

Filter by: name or deployment status

postgresql View

Main Attributes

Name: Runtime: Enabled: Status: Last enabled: Last disabled:

Add Deployment

Upload Deployment 1 Specify Names 2

Choose a file or drag it here

Cancel < Back Next >

← → ↻ 127.0.0.1:9990/console/index.html#deployments;path=deployment~dply-postgresql

HAL Management Console Reload Required admin

Homepage Deployments Configuration Runtime Patching Access Control

Deployment (1) ⊖ ⊕

Filter by: name or deployment status

postgresql View

postgresql

✓ The deployment **postgresql** is enabled and active. [Disable](#)

Main Attributes

Name:	postgresql
Runtime Name:	postgresql-42.2.20.jar
Enabled, Managed, Exploded:	✓ ✓ ✗
Status:	OK
Last enabled at:	6/25/21, 10:34 AM
Last disabled at:	n/a

← → ↻ 127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

HAL Management Console Reload Required admin

Homepage Deployments Configuration Runtime Patching Access Control

Configuration	Subsystem (31)	Datasources & Drivers	Datasource
Subsystems	Filter by: name or subtitle	Datasources	Filter by: name, xa, .../disabled, deployment
Interfaces	Batch	JDBC Drivers	ExampleDS
Socket Bindings	Core Management		
Paths	Datasources & Drivers		
System Properties	Deployment Scanners		
	Discovery		
	Distributable Web		
	EE		
	EJB		

Datasources

The two general types of resources are referred to as datasources and XA datasources.

- **Non-XA datasources** are used for applications which do not use transactions, or applications which use transactions with a single database.
- **XA datasources** are used by applications whose transactions are distributed across multiple databases. XA datasources introduce additional overhead.

Add a new Datasource as below

← → ↻ 127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

HAL Management Console Reload Required admin

Homepage Deployments Configuration Runtime Patching Access Control

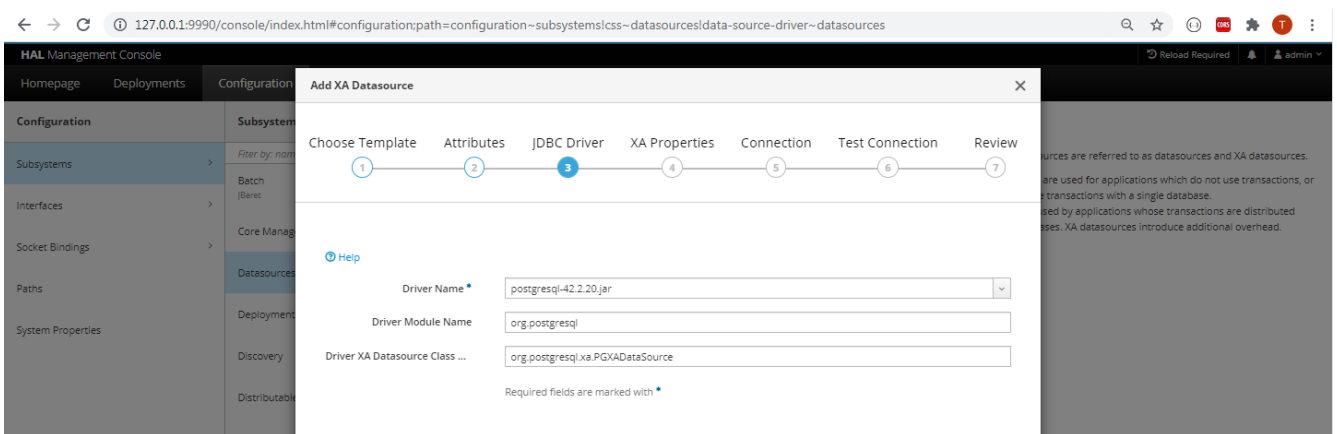
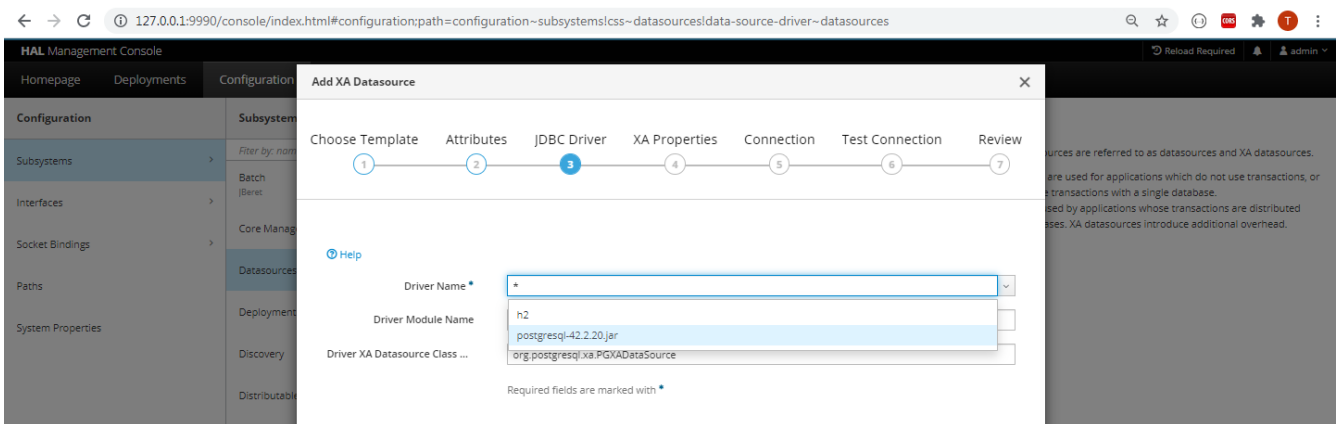
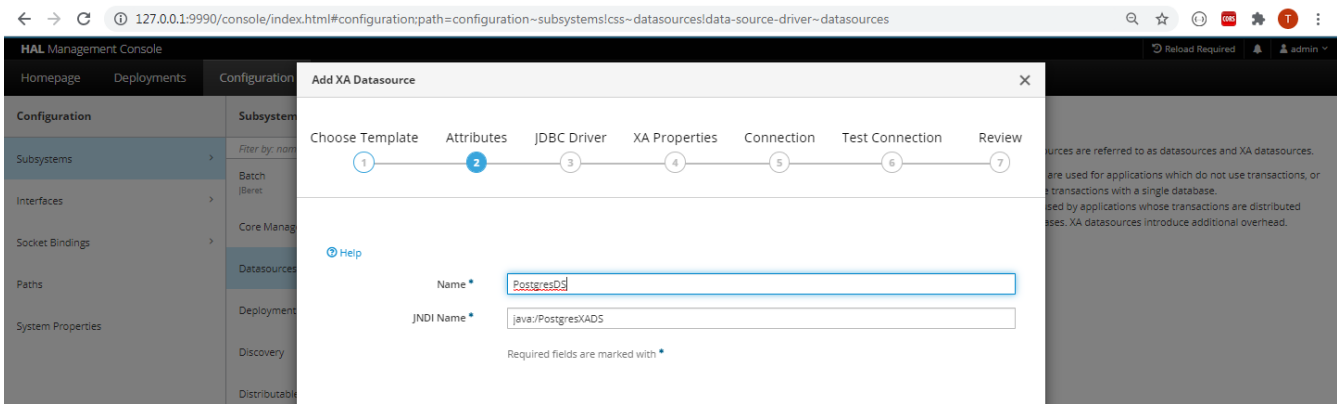
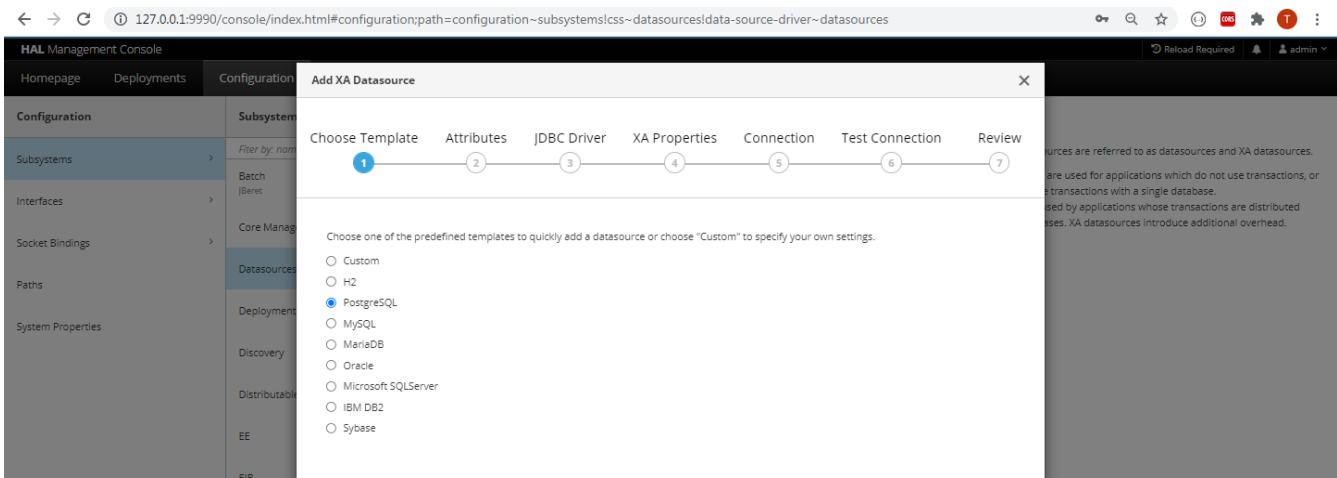
Configuration	Subsystem (31)	Datasources & Drivers	Datasource
Subsystems	Filter by: name or subtitle	Datasources	Filter by: name, xa, .../disabled, deployment
Interfaces	Batch	JDBC Drivers	ExampleDS
Socket Bindings	Core Management		
Paths	Datasources & Drivers		
System Properties	Deployment Scanners		
	Discovery		
	Distributable Web		
	EE		
	EJB		

Datasources

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Add Datasource  
Add XA Datasource



Add the XA Property values that identifies where your Postgres database is running **ServerName=192.168.99.100**, **PortNumber=5432**, **DatabaseName=postgresdb**

HAL Management Console

127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

Reload Required admin

Configuration Subsystem

Subsystems Filter by name

Interfaces

Socket Bindings

Paths

System Properties

Batch JBeret

Core Management

Datasources

Deployment

Discovery

Distributable

Add XA Datasource

Choose Template 1 Attributes 2 JDBC Driver 3 XA Properties 4 Connection 5 Test Connection 6 Review 7

Help

Value \*

PortNumber=5432 DatabaseName=postgresdb ServerName=192.168.99.100

Add new properties as key=value pairs. Press + to add and - to remove them.

Required fields are marked with \*

HAL Management Console

127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

Reload Required admin

Configuration Subsystem

Subsystems Filter by name

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System Properties

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Core Management

Datasources

Deployment

Discovery

Distributable

Add XA Datasource

Choose Template 1 Attributes 2 JDBC Driver 3 XA Properties 4 Connection 5 Test Connection 6 Review 7

Help

User Name root

Password root

Security Domain

HAL Management Console

127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

Reload Required admin

Configuration Subsystem

Subsystems Filter by name

Interfaces

Socket Bindings

Paths

System Properties

Batch JBeret

Core Management

Datasources

Deployment

Discovery

Distributable

Add XA Datasource

Choose Template 1 Attributes 2 JDBC Driver 3 XA Properties 4 Connection 5 Test Connection 6 Review 7

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

HAL Management Console

127.0.0.1:9990/console/index.html#configuration;path=configuration~subsystems!css~datasources!data-source-driver~datasources

Reload Required admin

Configuration Subsystem

Subsystems Filter by name

Interfaces

Socket Bindings

Paths

System Properties

Batch JBeret

Core Management

Datasources

Deployment

Discovery

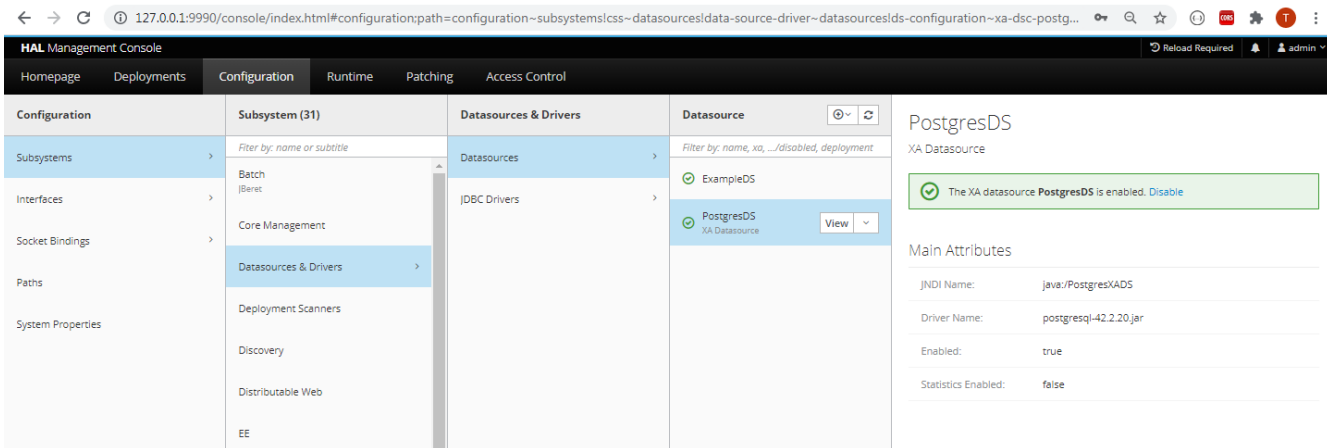
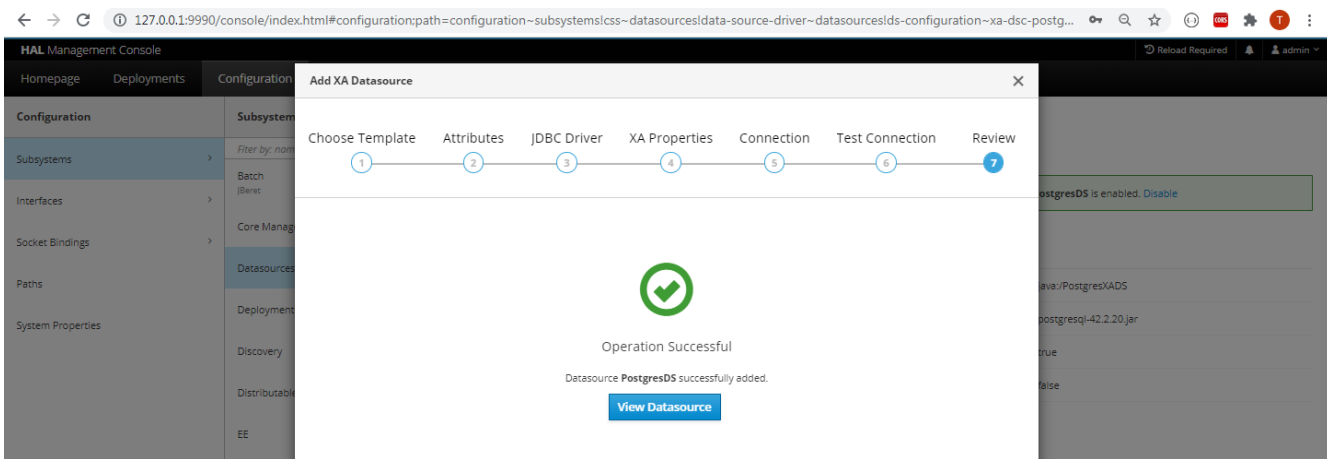
Distributable

Add XA Datasource

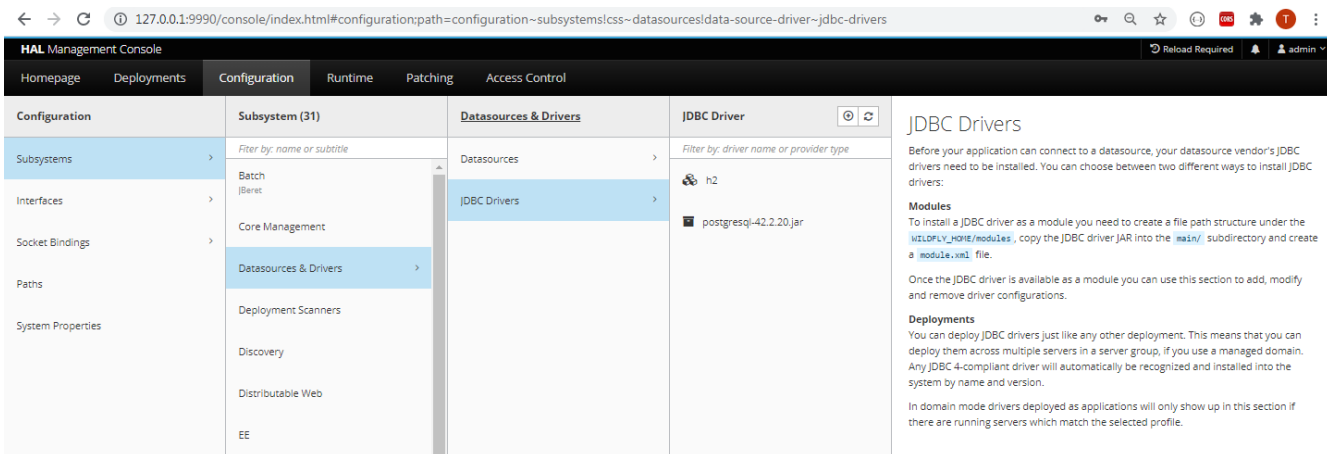
Choose Template 1 Attributes 2 JDBC Driver 3 XA Properties 4 Connection 5 Test Connection 6 Review 7

Test Connection Successful

Successfully tested connection for datasource **PostgresDS**.



You now have the Postgres datasource connected and available for use.





127.0.0.1:9990/console/index.html#deployments:path=deployment~dply-postgresql

HAL Management Console

Homepage Deployments Configuration Runtime Patching Access Control

Deployment (1)

Filter by: name or deployment status

postgresql

Upload Deployment  
Add Unmanaged Deployment  
Create Empty Deployment

deployment **postgresql** is enabled and active. [Disable](#)

Main Attributes

Name:	postgresql
Runtime Name:	postgresql-42.2.20.jar
Enabled, Managed, Exploded:	✓ ✓ ✗
Status:	OK
Last enabled at:	6/25/21, 10:34 AM
Last disabled at:	n/a

You can now upload your Legacy application .JAR or .WAR files using Postgres as database in the Deployment section.

127.0.0.1:9990/console/index.html#deployments:path=deployment~dply-postgresql

HAL Management Console

Homepage Deployments Configuration

Deployment (1)

Filter by: name or deployment status

postgresql

View

Main Attributes

Add Deployment

Upload Deployment 1 Specify Names 2

java-hello-world.war

127.0.0.1:9990/console/index.html#deployments:path=deployment~dply-postgresql

HAL Management Console

Homepage Deployments Configuration

Deployment (1)

Filter by: name or deployment status

postgresql

View

Main Attributes

Add Deployment

Upload Deployment 1 Specify Names 2

Help

Name \*

Runtime Name

Enabled ☒

Required fields are marked with \*

127.0.0.1:9990/console/index.html#deployments:path=deployment~dply-java-hello-world

HAL Management Console

Homepage Deployments Configuration

Deployment (2)

Filter by: name or deployment status

java-hello-world

View

postgresql

Main Attributes

Add Deployment

Upload Deployment 1 Specify Names 2

Upload successful

java-hello-world has been successfully uploaded to the content repository.

[View Deployment](#)

← → ↻ ⓘ 127.0.0.1:9990/console/index.html#deployments:path=deployment~dply-java-hello-world 🔑 🔍 ☆ ⌚ 📺 🛠️ 🔴 ⋮

HAL Management Console 🔁 Reload Required 🔔 admin ▾

Homepage Deployments Configuration Runtime Patching Access Control

Deployment (2) 📄 🔄

Filter by: name or deployment status

📄 java-hello-world View ▾

📄 postgresq

java-hello-world

✔️ The deployment **java-hello-world** is enabled and active. [Disable](#)

Main Attributes

Name:	java-hello-world
Runtime Name:	java-hello-world.war
Context Root:	<a href="#">/java-hello-world</a>
Enabled, Managed, Exploded:	✔️ ✔️ ✖️
Status:	OK
Last enabled at:	6/25/21, 11:15 AM
Last disabled at:	n/a

← → ↻ ⓘ 127.0.0.1:8080/java-hello-world/ 🔍 ☆ ⌚ 📺 🛠️ 🔴 ⋮

Hello World ?