Project3 OpenGauss && PostgreSQL Docker configuration

Docker Download and Init

windows

https://docs.docker.com/desktop/setup/install/windows-install/

MacOS

https://docs.docker.com/desktop/setup/install/mac-install/

Please follow the manual download and install the Docker Desktop application(Sometimes, proxy is needed).

Database in Docker Deploy

Pull the image

```
docker pull docker.1panel.live/enmotech/opengauss:3.1.1
docker pull docker.1panel.live/ubuntu/postgres:14-22.04_beta
```

Run the image

Run the OpenGauss

```
docker run --name project3-opengauss --privileged=true \
    -d -e GS_PASSWORD=<!!!your db password!!!> \
    -v <!!!persist directory!!!>:/var/lib/opengauss  -u root \
    -p 15432:5432 \
    docker.1panel.live/enmotech/opengauss:3.1.1
```

`GS_PASSWORD`: opengauss docker instance password

> **openGauss password complexity requirements: the password must be at least 8 characters long and contain uppercase and lowercase English letters, numbers, and special characters. If you cannot access the container, please use `docker logs <container_id>` to make sure the password is work**

`Persist directory`: store the opengauss database file in which directory in your computer

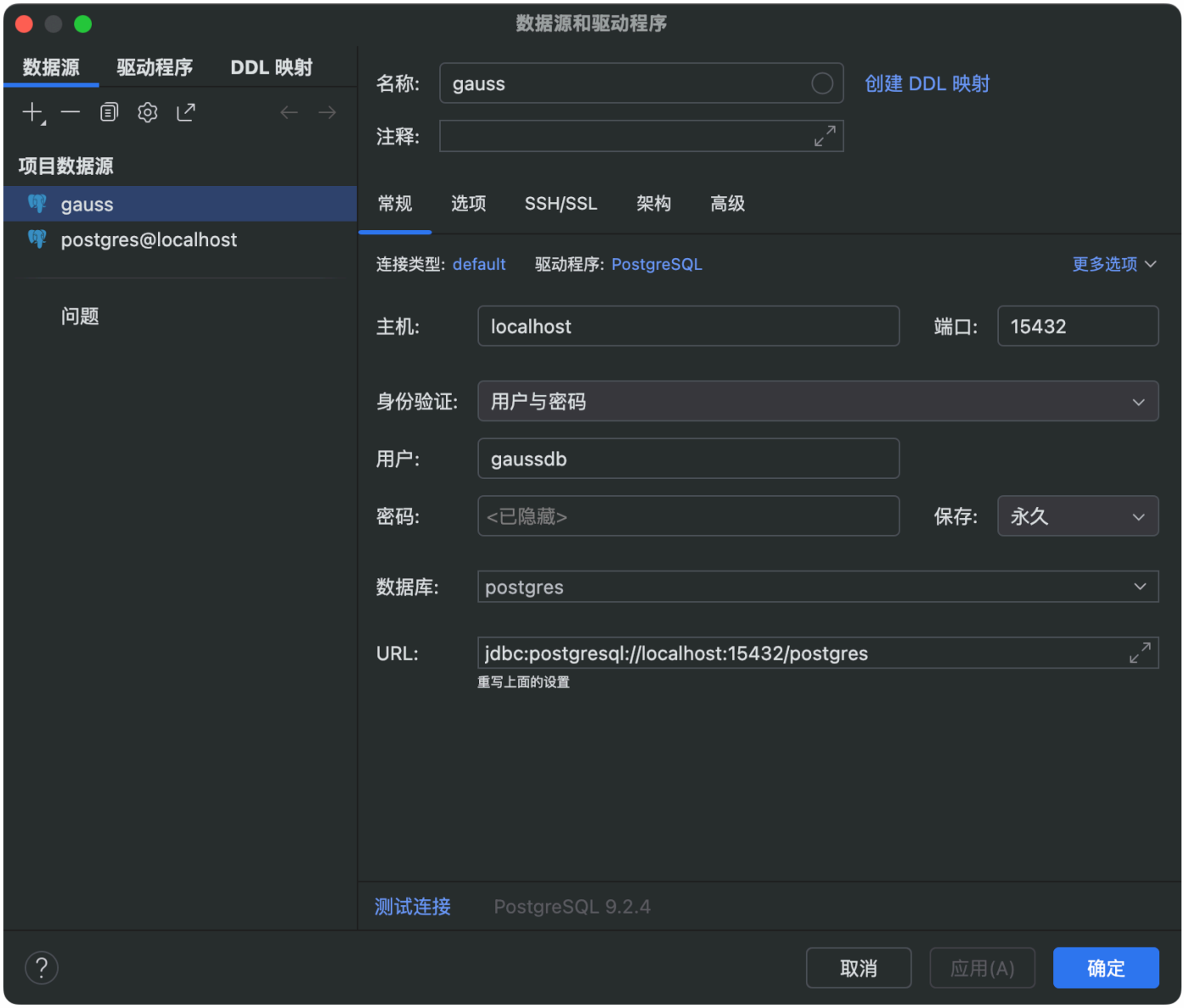
Please modify those options in the command and run it in your local terminal.

The url is `localhost` (if you deployed in another server, please the the server ip)

After executing, the opengauss runs on your computer and listens to port 15432.

You can use the Postgres compatible driver to connect it.

The username is : `gaussdb`, The password is configured by yourself.



Run the Postgresql

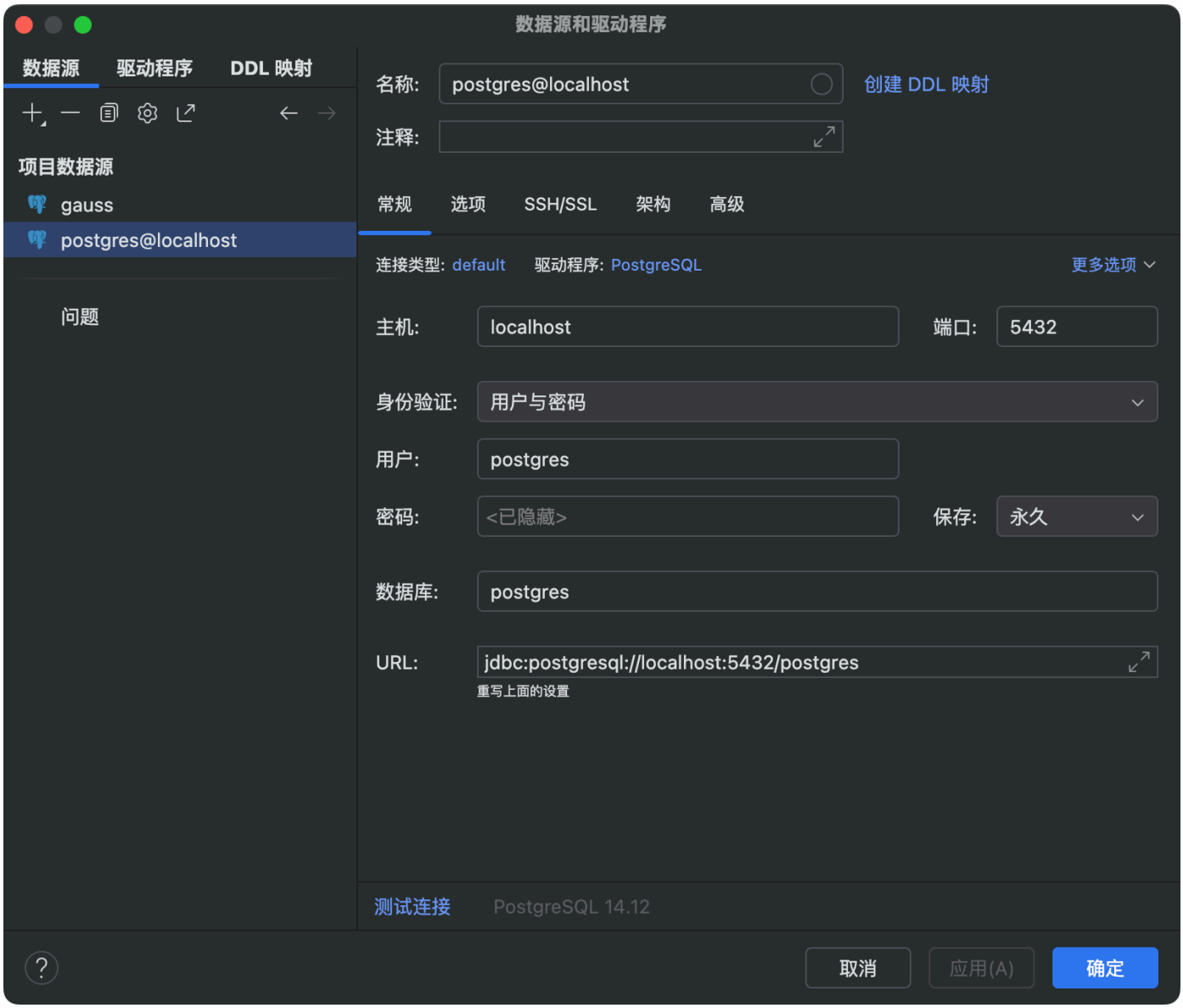
```
docker run -d \
  --name project3-postgres \
  -e POSTGRES_USER=postgres
  -e POSTGRES_PASSWORD=<!!!your db password!!!> \
  -e POSTGRES_DB=postgres
  -e PGDATA=/var/lib/postgresql/data/pgdata \
  -p 5432:5432 \
  -v <!!!persist directory!!!>:/var/lib/postgresql/data \
  docker.1panel.live/ubuntu/postgres:14-22.04_beta
```

`POSTGRES_PASSWORD`: Postgresql docker instance password

> need no complex password

`PGDATA`: store the PostgreSQL database file in which directory in your computer

After executing, the Postgres runs on your computer and listens to port 15432.

You can use the Postgres driver to connect it.

The username is : `postgres`, The password is configured by yourself.