

Title: Docker: Springboot container can not connect to PostgreSql Container Connection error

Post Body:

I am building my first Springboot 2.0 application. I am trying to put my Springboot application into one docker container and my PostgresDB into another container.

My Dockerfile

```
FROM frolovlad/alpine-oraclejdk8:slim
VOLUME /tmp
ADD springboot-api-demo-0.1*.jar app.jar
RUN sh -c 'touch /app.jar'
```

My docker-compose.yml file

```
version: '2.1'
services:
  springboot-api-demo:
    image: 'fw/springboot-api-demo'
    mem_limit: 1024m
    ports:
      - '54321:54321'
```

I am using Springboot JPA Data 2.0 with below config data in my application.properties

```
spring.datasource.url= jdbc:postgresql://localhost:54321/java_learning
spring.datasource.username=postgres
spring.datasource.password=postgres
```

I can test that Both of the Images are up. Also from docker log and docker events, I see that postgres Container is running fine, even I can access it and also created a DB too. But springboot container started but i died because it could not connect to postgres and throwing error below.

```
Unable to obtain connection from database: The connection attempt failed
```

Note that my host machine already has Postgres on port 5432 thats why I did a port mapping ofr 54321:5432 on my postgres container. Here is Proof :) -

```
➔ springboot-api-demo git:(master) X lsof -i:54321
COMMAND      PID    USER   FD   TYPE    DEVICE  SIZE      0
COMMAND      PID    USER   FD   TYPE    DEVICE  SIZE      0
```

I am not sure what is the problem. But my Springboot application is not able to connect my postgres container which is running fine with proper creadentials.

Accepted Answer: None

Highest Rated Answer:

Try with :

```
spring.datasource.url= jdbc:postgresql://pgdb:5432/java_learning
```

The postgres database is not running on localhost, it's running in the other container which has an other IP (yet unknown).

Thanksfully, docker-compose automatically create a network shared among all the containers in the docker-compose.yml (unless explicitly said to do not), as a result you can magically use the **service name as an hostname**.

Also, you have a typo in the port, Postgres use 5432 by default, not 54321