1. How to deploy

Open docker folder.

1. If you use Windows. Then execute directly the start script.

This supposes that docker for windows is already available.

\*Note: Docker-machine for windows uses as default the ip 192.168.99.100 . If this is tweaked then you must adjust this ip accordingly to docker-compose.yml in DATABASE\_URL environment property.

1. If you use Linux

In docker-compose.yml change the ip in environment property DATABASE\_URL from 192.168.99.100 to localhost. Docker for linux uses as default ip for docker localhost. If this is tweaked then you must adjust this ip accordingly

Execute the start script.

\*\*Note for both environments: If another docker container for postgresql already runs under port 5432 it must be first removed with “docker container rm -f container\_name” and then we can execute the start script.

Wait 20-30 seconds for sping boot to start up.

1. How to Test

WSDL file should be available in Windows under

<http://192.168.99.100/ws/map-points.wsdl>

Or

<http://localhost:9595/ws/map-points.wsdl> in linux environment.

Then using a free version of SoapUi which can be found under <https://www.soapui.org/> we can create a project by importing the above link of our wsdl file.

Then all endpoints can be tested easily.

1. What will be deployed with start script
2. One docker container will be started for PostgreSQL which will be available under port 5432. This PostgreSQL container will come from a custom image of PostgreSQL which comes with PostGIS extension installed. PostGIS extension will be used to store and retrieve geospatial data from our database.

During startup of our docker database **about 15.500 rows will be imported from an existing worldcitiesCSV file**. Our Database will contain data for most big cities around the world.

These information include:

1. Name of the city
2. Name of the country
3. Population of the city
4. Coordinates of a point in the center of the city. Coordinates are stored in geospatial format as a Geometry Point.
5. Each row will also contain another column with the name request\_counter with starting value of 0. This counter will be increased each time a row is selected as the nearest point from our API.
6. One docker container will be started from our spring boot app under port 9595.