**How to create a multi-node Cassandra 2 cluster on Docker containers**

First of all, you will need a Linux server with root access (in my case it’s a CentOS 7.4). Start by installing Docker, which is easily done from the standard repositories.

Make sure that the Docker daemon is running, if not start it manually and enable it at startup:

systemctl start docker  
systemctl enable docker

In order to simplify the configuration of the cluster, the containers will need static IPs, so create a Docker network:

docker network create --subnet=172.18.0.0/16 mynet123

Cassandra needs Java to run and installing it is time-consuming, so download a Docker image that already has it installed without other additional packages. In this example, it is an Ubuntu 17 image with jdk 8:

docker pull docker.io/dongjoon/ubuntu17.04-jdk8

Check if the new image is available by executing the command:

docker images



Starting from this basic image, you will have to prepare the containers that will run Cassandra nodes. This can be done in two ways. The first method is to update the basic image and save it as a new one, which will serve as a base for the containers. The second is to use a Dockerfile to update and create a new image automatically. In this article, we will explore both ways, starting with the first.

Run the first container from the basic image, assigning it a static IP in the network that you have created:

docker run --net mynet123 --ip 172.18.0.22 -it docker.io/dongjoon/ubuntu17.04-jdk8 /bin/bash

You should be in a bash shell inside the container:

