# Homework M3: Advanced Docker

## Assignment

You must execute the following set of tasks:

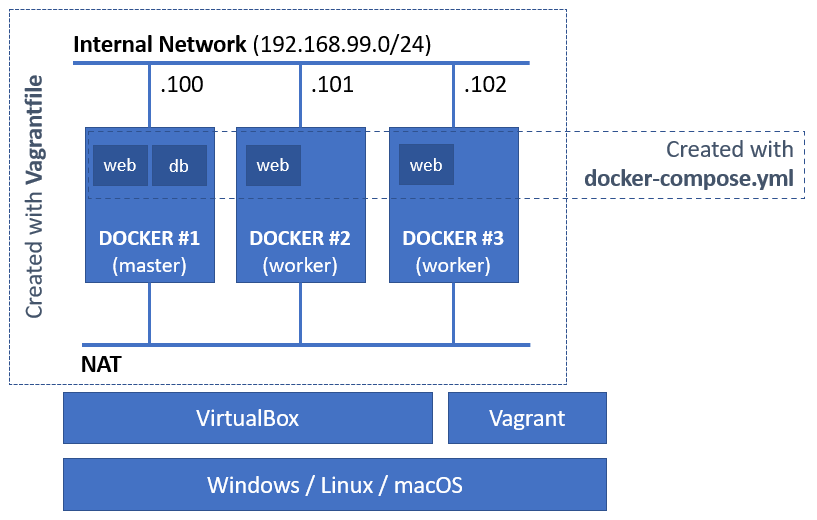
1. Try to create a **Vagrantfile** which creates a **Docker Swarm** cluster with **3 nodes**
2. Create own **docker-compose.yml** file with:

* Combination of two containers, based on own images – **web** (php+nginx) and **db** (mysql)
* The application should connect to the database and display a table’s content which could be anything – for example, the top 10 cities by population in Bulgaria
* Replicate the web container with **factor 3**
* Deploy the solution on the swarm cluster created in the first part

It is not required both tasks to be automated and executed together. Instead, at first, prepare the **Vagrantfile** and spin up the environment. Then create the **docker-compose.yml** file, upload it on the cluster and execute it

## Target Infrastructure

After you fulfil the assignment tasks, your infrastructure may look like:



Vagrant file:

3 vms with docker installed.

Creating manual the swarm (Manager 1vm) and join the workers manual

Docker-compose yml with network and two containers (3 replicas for web)

Html and db code can be stored as a folder and then add in the containers