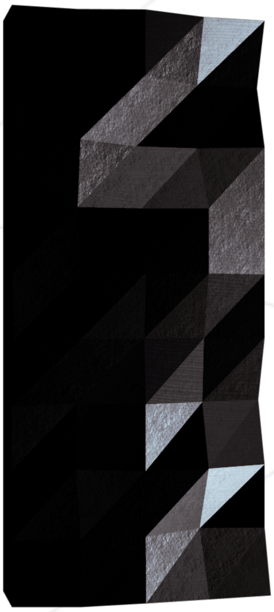

Ft_services

Summary: This is an Administration, System and Network subject.

Contents

Chapter I

Introduction

This topic will introduce you to kubernetes. This topic aims to deepen your knowledge in Docker with docker-compsoe utilisation, and discover clusturing and deployment with Kubernetes. You will virtualize a network and do "clustering".

Chapter II

General instructions

- You must make all the necessary files for the configuration of your server in a folder `srcs`.
- Your `setup.sh` file should be at the root of your repo. It will setup all your application.
- This subject requires old notions and news. We therefore advise you not to be afraid to read a lot of documents about docker, kubernetes, and all the things useful for the project.

Chapter III

Mandatory part

The project consists of setting up an infrastructure of different services, with its own rules. To do this, you must use `Kubernetes`.
You will need to set up a You will need to set up a multi-service `cluster` **`Each service will have to turn in a dedicated container`**.
Each container must `obligatorily` bear the same name as the service concerned. You will also must to set up :

- The Kubernetes web dashboard. This is useful for managing your cluster.
- The `Ingress Controller` object who managed the external access of your servicies. He will redirected to your Nginx container.
- A `Nginx` server listening on ports 80 and 443.
- A `FTPS` server open on port 21.
- A `wordpress` open on port 5050, Un `wordpress` ouvert sur le port 5050, working with a MySQL database. They must be in two separate containers. The WordPress will have several users and an administrator.
- `Phpmyadmin`, open on port 5000 ans link with MySQL database.
- A `grafana`, open on port 3000, link with an `influxDB` database. Grafana will monitoring `all` your containers. You must create one dashboard per service. InfluxDB and grafana will be in two distincts containers.
- In case of crash or stop of one of the two database containers, you will have to make shute data persist.
- You must access in ssh connexion to the Nginx container.
- All your containers must restart in case of crash or stop.

Chapter IV

Turn-in and peer-evaluation

You must make your work on your git repository.