

Application Containerization Lab

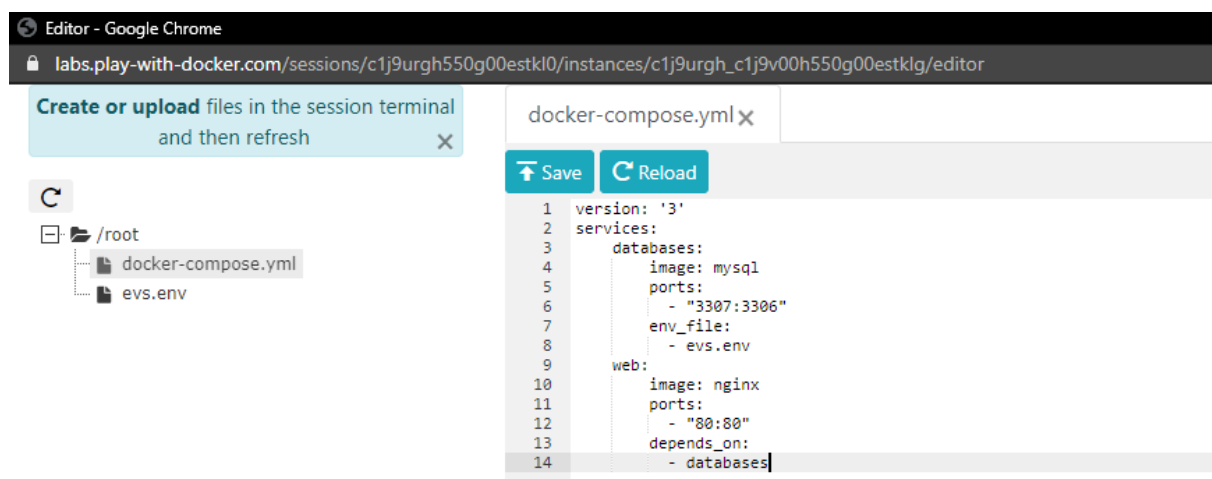
Experiment - 6

Aim: Understanding Docker Compose

- 1 Creating docker-compose.yml and evs.env

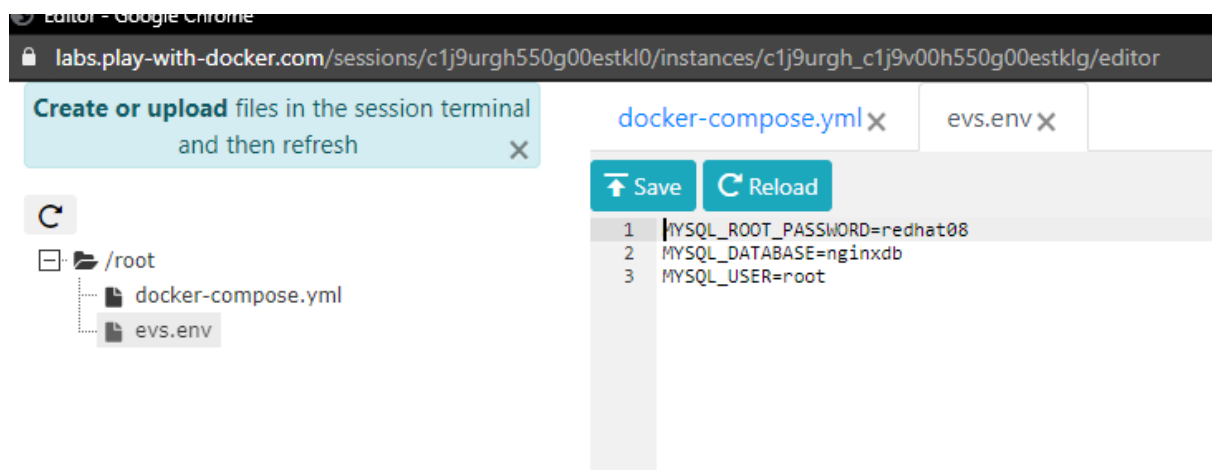
```
[node1] (local) root@192.168.0.8 ~  
$ touch evs.env  
[node1] (local) root@192.168.0.8 ~  
$ touch docker-compose.yml
```

- 2 Writing the contents of file



The screenshot shows a web-based code editor interface. On the left, a file explorer shows the root directory with two files: `docker-compose.yml` and `evs.env`. The main editor area displays the content of `docker-compose.yml`, which is a YAML configuration for a Docker Compose stack. The configuration includes a version '3', a service named 'databases' using the 'mysql' image with port '3307:3306' and environment file 'evs.env', and a service named 'web' using the 'nginx' image with port '80:80' and a dependency on the 'databases' service.

```
1 version: '3'  
2 services:  
3   databases:  
4     image: mysql  
5     ports:  
6       - "3307:3306"  
7     env_file:  
8       - evs.env  
9   web:  
10    image: nginx  
11    ports:  
12      - "80:80"  
13    depends_on:  
14      - databases
```



The screenshot shows the same web-based code editor interface, but now the `evs.env` file is selected in the file explorer and its content is displayed in the main editor area. The file contains three environment variables for MySQL: `MYSQL_ROOT_PASSWORD=redhat08`, `MYSQL_DATABASE=nginxdb`, and `MYSQL_USER=root`.

```
1 MYSQL_ROOT_PASSWORD=redhat08  
2 MYSQL_DATABASE=nginxdb  
3 MYSQL_USER=root
```

3 Running the command

```
$ docker-compose up -d
Creating network "root_default" with the default driver
Pulling databases (mysql:...)
latest: Pulling from library/mysql
75646c2fb410: Pull complete
878f3d947b10: Pull complete
1a2dd2f75b04: Pull complete
8faaceef2b94: Pull complete
b77c8c445ec2: Pull complete
074029aeaa5f: Pull complete
5a1122545c6c: Pull complete
6c95ccd00139: Pull complete
60a719448fdb: Pull complete
f31898a387a3: Pull complete
... done
Pulling web (nginx:...)
latest: Pulling from library/nginx
75646c2fb410: Already exists
6128033c842f: Pull complete
71a81b5270eb: Pull complete
b5fc821c48a1: Pull complete
da3f514a6428: Pull complete
8be359fed358: Pull complete
Digest: sha256:bae781e7f518e0fb02245140c97e6ddc9f5fcf6aecc043dd9d17e33aec81c832
Status: Downloaded newer image for nginx:latest
Creating root_databases_1 ... done
Creating root_web_1 ... done
```

4 Running "docker ps"

```
[node1] (local) root@192.168.0.8 ~
$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS              PORTS
NAMES
137e67c9f982   nginx    "/docker-entrypoint. ..." 55 seconds ago Up 54 seconds      0.0.0.0:80->80/tcp
root_web_1
1869c0d1ff58   mysql    "docker-entrypoint.s ..." 56 seconds ago Exited (1) 54 seconds ago
root_databases_1
```