

Deploy SIMO website Manual

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1 Introduction

- SIMO System
- Deploy : Operation: Windows 10, Use Docker platform to deploy

2 Tool and version

- Docker Desktop 4.40.0 (187762)

3 Docker Image

Link to get the image : <https://hub.docker.com/u/phamphuchau28>

- Frontend Image : https://hub.docker.com/r/phamphuchau28/simo_frontend_img
- Backend Image : https://hub.docker.com/r/phamphuchau28/simo_backend_img

Figure 1: Docker Images

4 Folder Directory

D:\Deploy\

```
.test_env  
.prod_env  
.env  
docker-compose.yml  
docker-compose.prod.yml  
docker-compose.test.yml
```

```

run_prod.bat
run_test.bat
prod
test
D:\UPLOAD_DATA
PROD
TEST

```

Note

Grand full permission for the folder by running command line : "
 icacs "<Folder Path>" /grant <username>:F /t"
 EXP: "icacs "D:" /grant Administrator:F /t"

5 Environment Config

The enironment configuration is set in these files contain : Public key, secret key, database connection string, configuration system like port, etc.

D:\Deploy\

```

.test_env
.prod_env
.env

```

6 Deployment

6.1 Run test Environment

Double-click on the file run_test.bat to deploy the test environment.

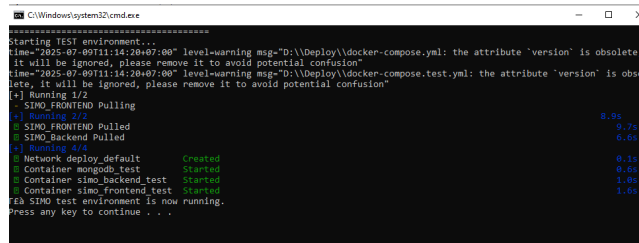
```

C:\Windows\system32\cmd.exe
Cleaning up PRODUCTION environment...
time="2025-07-09T11:08:17+07:00" level=warning msg="D:\\Deploy\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
time="2025-07-09T11:08:17+07:00" level=warning msg="D:\\Deploy\\docker-compose.prod.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 4/4
   Container simo_frontend_test  Removed      0.0s
   Container simo_backend_test   Removed     10.0s
   Container mongodb_test        Removed     1.3s
   Network deploy_default        Removed     0.0s
Starting TEST environment...
time="2025-07-09T11:08:31+07:00" level=warning msg="D:\\Deploy\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
time="2025-07-09T11:08:31+07:00" level=warning msg="D:\\Deploy\\docker-compose.test.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 4/4
   Network deploy_default        Created       0.1s
   Container mongodb_test        Started       0.0s
   Container simo_backend_test    Started       1.0s
   Container simo_frontend_test   Started       1.7s
If SIMO test environment is now running.
Press any key to continue . . .

```

Figure 2: Stop old container and start new in test environment

If the image does not have, the docker will automatically download.



6.2 Run Production Environment

Double-click on the file `run_prod.bat` to deploy production environment

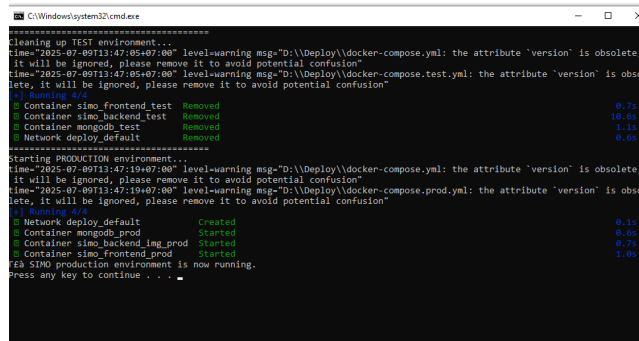


Figure 4: Stop old container and start new

If the image does not have, the docker will automatically download.

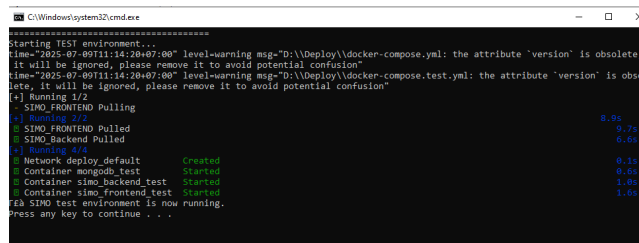


Figure 5: Pull Image and Deploy

7 Monitoring

- Frontend <http://localhost:5173>
- Backend <http://localhost:8081/actuator/health>

- Database : Kt ni MongoDB bng MongoDB Compass: mongodb://admin:admin123@localhost:27017

8 Troubleshooting

8.1 Port is already use

1. Get process id is running this port : "5173" by commnand : netstat -ano | findstr ":5173"

```
C:\Users\Administrator>netstat -ano |findstr "5173"
TCP    0.0.0.0:5173          0.0.0.0:0           LISTENING        5288
TCP    [::]:5173           [::]:0              LISTENING        5288
TCP    [::1]:5173          [::]:0              LISTENING        2584
```

Figure 6: Check port

2. Check process name is running : tasklist /FI "PID eq <PID>"
 - (a) Get process id is running this port : "5173" by commnand : netstat -ano | findstr ":5173"

```
C:\Users\Administrator>tasklist /FI "PID eq 5288"
Image Name                    PID Session Name        Session#    Mem Usage
=====
com.docker.backend.exe        5288 Console             1          193,448 K
```

Figure 7: Check port

- (b) Kill the port by typing this commnad : taskkill /PID <PID> -F

```
C:\Users\Administrator>taskkill /PID 5288 /F
SUCCESS: The process with PID 5288 has been terminated.

C:\Users\Administrator>
```

Figure 8: Check port