

Docker-Airflow Infrastructure 建置方式

建置方式:

1. 安裝Docker
2. Install docker Compose

一 .Install docker on AWS EC2 Ubuntu 18.04 (script method)

Linux: Ubuntu 18.04

<https://geekylane.com/install-docker-on-aws-ec2-ubuntu-18-04-script-method/>

Hint: AWS EC2機器要有權限從gitlab中clone 專案下來

```
curl -fsSL https://get.docker.com -o get-docker.sh
ls
#會有這個檔案 get-docker.sh
sudo sh get-docker.sh

# Confirm the installation of docker on EC2 Ubuntu 18.04 instance
sudo docker -v
sudo docker info
```

Question: How to run “**docker**” command without “**sudo**” on AWS EC2 Ubuntu 18.04 instance?

```
cat /etc/passwd | grep ubuntu
ubuntu:x:1000:1000:Ubuntu:/home/ubuntu:/bin/bash
sudo usermod -aG docker ubuntu
cat /etc/group | grep docker
# 成功的話會顯示
docker:x:999:ubuntu
#Add airflow user
sudo adduser airflow
sudo usermod -aG docker airflow
```

Log out and log back in again to pick up the new `docker` group permissions. You can accomplish this by closing your current SSH terminal window and reconnecting to your instance in a new one. Your new SSH session will have the appropriate `docker` group permissions.

二 Install docker Compose on AWS EC2 Ubuntu 18.04 (script method)

version: docker composer-1.4.2+

<https://docs.docker.com/compose/install/>

```
#Run this command to download the current stable release of Docker Compose:
sudo curl -L "https://github.com/docker/compose/releases/download/1.25.4/docker-compose"

#Apply executable permissions to the binary:
sudo chmod +x /usr/local/bin/docker-compose
```

```
docker-compose --version
```

三.Install Airflow Infrastructure

Step1:進入ec2 主機進行安裝

安裝airflow Infrastructure及設置Private.ini檔案 (如果prod環境中，已經架設好airflow及設置好Private.ini檔案，就跳過此步驟)

```
cd ~
git clone git@tdc.techdesignlink.com:data/docker-airflow-infrastructurecode.git
cp -r docker-airflow-infrastructurecode/ ~/docker-airflow/
rm -rf docker-airflow-infrastructurecode

# 建置ubuntu/docker-airflow:1.10.6 image
cp ~/docker-airflow
docker build -t ubuntu/docker-airflow:1.10.6 .

# 啟動airflow
docker-compose -f docker-compose-CeleryExecutor.yml up -d
```

註：db_user：為連接datamart-prod資料庫的使用者帳號，在datamart資料庫中，要有創建表格、寫入的資料修改資料、刪除資料和執行sql dump的權限。

註：access_key和secret_key：DynamoDB服務中要具有開啟新的資料表格、寫入和修改資料表格的權限。