1. **Installing PIP**

sudo apt update

sudo apt upgrade

sudo apt-get install software-properties-common

sudo apt-add-repository universe

sudo apt-get install python-setuptools

sudo apt install python3-pip

grep PATH ~/.bashrc ~/.profile ~/.bash\_profile ~/.bash\_login \

/etc/profile /etc/environment /etc/bash.bashrc

sudoedit /etc/enviromnment

PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games"

1. **Install Airflow Dependencies:**

sudo apt-get install libmysqlclient-dev

sudo apt-get install libssl-dev

sudo apt-get install libkrb5-dev

sudo apt-get install python3-distutils

1. **Create py environment**

**pip3 install virtualenv**

**virtualenv -p python3 myenv**

**source myenv/bin/activate**

python3 --version

1. **Install airflow**

**pip install 'apache-airflow==2.6.3' \**

**--constraint** [**https://raw.githubusercontent.com/apache/airflow/constraints-2.6.3/constraints-3.8.txt**](https://raw.githubusercontent.com/apache/airflow/constraints-2.6.3/constraints-3.8.txt)

**airflow version**

**systemctl reboot -i**

**export AIRFLOW\_HOME=.**

pip install apache-**airflow**[kubernetes]

**“mkdir dags”**

**airflow db init**

airflow db upgrade

**sudo ufw allow 8080**

**airflow users create --role Admin --username admin --email admin --firstname admin --lastname admin**

**airflow webserver -p 8080**

**cd /home/hadoop/airflow**

**source myenv/bin/activate**

**airflow scheduler**

**airflow config get-value core sql\_alchemy\_conn**

systemctl restart airflow

# **Install Docker Desktop on Ubuntu**

**sudo apt install gnome-terminal**

sudo apt-get update

**sudo apt-get install ca-certificates curl gnupg**

**sudo dpkg -i docker-desktop-4.22.0-amd64.deb**

**mkdir -p ./dags ./logs ./plugins ./config**

**echo -e "AIRFLOW\_UID=$(id -u)" > .env**

**AIRFLOW\_UID=50000**

pip install psycopg2-binary

**docker compose up airflow-init**

**docker compose up**

**docker compose up -d**

**docker compose down -v**

**docker ps**

**docker compose run airflow-worker airflow info**

**ducker ps**

**docker exec -it f5551ff19102 bash**

**airflow dags backfill --start-date 2023-08-01 --end-date 2023-08-08 dag\_with\_taskflow\_6**

kvm support is not enabled on this machine ubuntu docker

**sudo apt update**

**sudo apt install -y qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils**

**sudo adduser $USER libvirt**

**sudo adduser $USER kvm**

**sudo systemctl restart libvirtd**

**kvm-ok**

**Postgres**

## [Step 1 — Installing PostgreSQL](https://www.digitalocean.com/community/tutorials/how-to-install-postgresql-on-ubuntu-20-04-quickstart#step-1-installing-postgresql)

sudo apt-get install postgresql postgresql-contrib

sudo -u postgres psql

postgres=# CREATE USER airflow PASSWORD 'airflow';

CREATE ROLE

postgres=# CREATE DATABASE airflow;

CREATE DATABASE

postgres=# GRANT ALL PRIVILEGES ON ALL TABLES IN SCHEMA public TO airflow;

GRANT

sudo apt install libpq-dev

pip install psycopg2

vim airflow.cfg

\l

service postgresql restart

executor = LocalExecutorsql\_alchemy\_conn = postgresql+psycopg2://airflow:airflow@localhost/airflow

**airflow db init**

airflow users create -r Admin -u admin -e admin@example.com -f admin -l user -p test

docker-compose up -d --no-deps --build postgres

**Error response from daemon: driver failed programming external connectivity on endpoint airflow-postgres-1 (acac75826e0087a8a4109f90b6a60bb78779697abe7ec0c3727f0563c61c8498): Error starting userland proxy: listen tcp4 0.0.0.0:5432: bind: address already in use**

sudo lsof -i :5432

sudo kill -9 <pid>

**minio**

**mkdir -p ~/minio/data**

**podman run \**

**-p 9001:9001 \**

**-p 9001:9001\**

**-v ~/minio/data:/data \**

**-e "MINIO\_ROOT\_USER=ROOTNAME" \**

**-e "MINIO\_ROOT\_PASSWORD=CHANGEME123" \**

**quay.io/minio/minio server /data --console-address ":9001"**

**>>> import sys**

**>>> from pprint import pprint**

**>>> pprint(sys.path)**

**['',**

**'/home/hadoop',**

**'/path/to/airflow/providers/apache',**

**'/usr/lib/python310.zip',**

**'/usr/lib/python3.10',**

**'/usr/lib/python3.10/lib-dynload',**

**'/home/hadoop/airflow/myenv/lib/python3.10/site-packages']**

sudo touch /etc/systemd/system/airflow-webserver.service

sudo systemctl daemon-reload

Now enable the service airflow-webserver.service

sudo systemctl enable airflow-webserver.service

and you can simply start the service by:

sudo systemctl start airflow-webserver.service

or

sudo service airflow-webserver start

# Step IV: Check Status of Service

You can check the status of service by :

sudo systemctl status airflow-webserver.service

or

sudo service airflow-webserver status

# Step V: Stop Service

To stop the service use following command

sudo systemctl stop airflow-webserver.service

or

sudo service airflow-webserver stop