

# Cloud and API deployment

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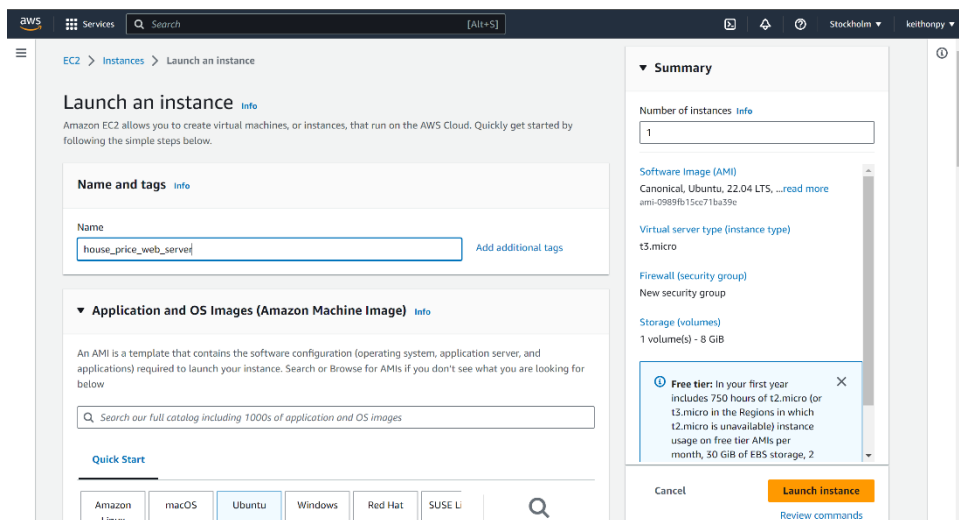
Batch code: LISUM23: 30

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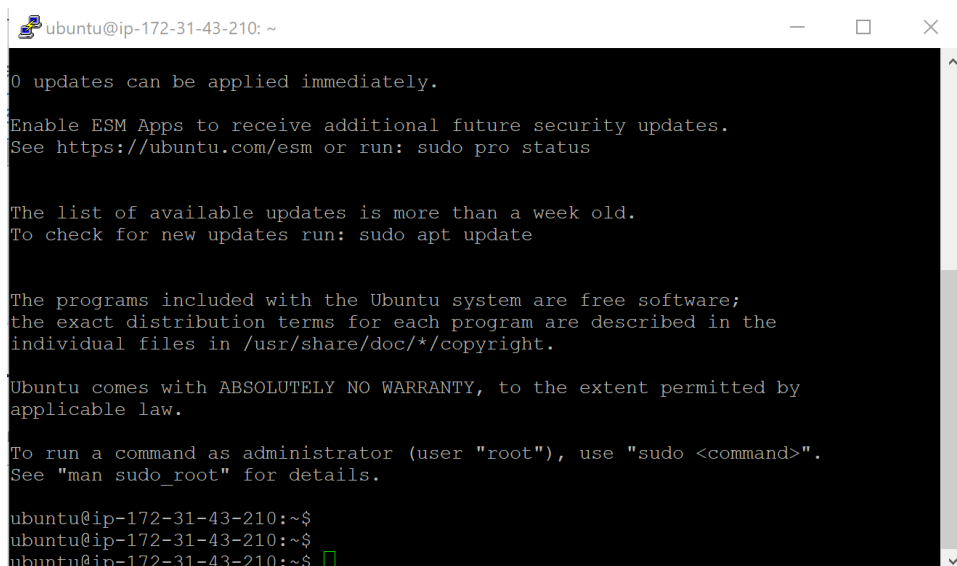
Submitted to: [https://github.com/keithonpy/data\\_glacier\\_log/tree/main/week\\_04/scripts](https://github.com/keithonpy/data_glacier_log/tree/main/week_04/scripts)

Snapshot:

## 1. Create a AWS EC2 instance



## 2. Remote connect with SSH



## 3. Install Python

```
ubuntu@ip-172-31-43-210: ~  
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Package  
s [656 kB]  
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-e  
n [104 kB]  
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f M  
etadata [532 B]  
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages  
[764 kB]  
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en  
[137 kB]  
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Met  
adata [16.3 kB]  
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Package  
s [36.5 kB]  
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-e  
n [7060 B]  
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f M  
etadata [260 B]  
Fetched 26.4 MB in 5s (4939 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
88 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-43-210:~$ sudo apt install python3 python3-pip tmux http
```

#### 4. Install apache

```
ubuntu@ip-172-31-43-210: ~/house_price_prediction_web  
* Serving Flask app 'app'  
* Debug mode: on  
WARNING: This is a development server. Do not use it in a production deployment.  
Use a production WSGI server instead.  
* Running on http://127.0.0.1:5000  
Press CTRL+C to quit  
* Restarting with stat  
* Debugger is active!  
* Debugger PIN: 871-192-507  
^C(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ python app.py  
python: can't open file '/home/ubuntu/house_price_prediction_web/apapp.py': [Err  
no 2] No such file or directory  
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ python app.py  
* Serving Flask app 'app'  
* Debug mode: on  
WARNING: This is a development server. Do not use it in a production deployment.  
Use a production WSGI server instead.  
* Running on http://127.0.0.1:5000  
Press CTRL+C to quit  
* Restarting with stat  
* Debugger is active!  
* Debugger PIN: 871-192-507  
^C(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ sudo apt-get in  
stall apache2 libapache2-mod-wsgi-py3
```

#### 5. Create app.wsgi file

```
ubuntu@ip-172-31-43-210: ~/house_price_prediction_web
activate_this = '/home/ubuntu/webapp/bin/activate_this.py'
with open(activate_this) as f:
    exec(f.read(), dict(__file__=activate_this))
import sys
import logging
logging.basicConfig(stream=sys.stderr)
sys.path.insert(0,"/var/www/html/flaskapp/")
from app import app as application
~
~
~
~
~
~
~
~
~
~
-- INSERT -- 8,35 All
```

## 6. Edit Apache configuration file

```
ubuntu@ip-172-31-43-210: ~/house_price_prediction_web
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html
WSGIDaemonProcess flaskapp threads=5
WSGIScriptAlias / /var/www/html/flaskapp/app.wsgi
<Directory flaskapp>
    WSGIProcessGroup flaskapp
    WSGIApplicationGroup %{GLOBAL}
    Order deny,allow
    Allow from all
</Directory>

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
-- INSERT -- 20,2-9 12%
```

## 7. Restart Apache

```
ubuntu@ip-172-31-43-210: ~/house_price_prediction_web

*** System restart required ***
Last login: Mon Jul 31 10:32:36 2023 from 81.107.158.97
ubuntu@ip-172-31-43-210:~$ ls
house_price_prediction_web  webapp
ubuntu@ip-172-31-43-210:~$ source webapp/bin/activate
(webapp) ubuntu@ip-172-31-43-210:~$ cd house_price_prediction_web/
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ ls
'Deployment of flask.pdf'  app.py  model  static  templates
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ vi app.wsgi
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ sudo ln -sT ~/hou
se_price_prediction_web/ /var/www/html/flaskapp
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ ls
'Deployment of flask.pdf'  app.py  model  static  templates
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ cd ~/house_price_
prediction_web/
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ vi app.wsgi
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ sudo nano /etc/ap
ache2/sites-enabled/000-default.conf
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ sudo vi /etc/apac
he2/sites-enabled/000-default.conf
(webapp) ubuntu@ip-172-31-43-210:~/house_price_prediction_web$ sudo service apac
he2 restart
```

## 8. Launched the web server

