



Jupyter Settings

Read in the browser:

<https://ubiquitous-bladder-8a5.notion.site/Jupyter-Settings-cbe17f9bf9294771bd42d5e2667fa341>

Preparation

The settings of Jupyter Notebooks

Preparation

1. Create a VM and associate a floating IP
2. Set Security Group `default`

The settings of Jupyter Notebooks

1. **Create a new config**

```
jupyter notebook --generate-config
```

```
ubuntu@haodong-zhao-temp:~$ jupyter notebook --generate-config
Writing default config to: /home/ubuntu/.jupyter/jupyter_notebook_config.py
ubuntu@haodong-zhao-temp:~$ vim /home/ubuntu/.jupyter/jupyter_notebook_config.py
```

2. **Generate password**

```
from notebook.auth import passwd

passwd()
```

```
ubuntu@haodong-zhao-temp:~/jupyter$ python3
Python 3.8.10 (default, Nov 26 2021, 20:14:08)
[GCC 9.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> from notebook.auth import passwd
>>> passwd()
Enter password:
Verify password:
'argon2:$argon2id$v=19$m=10240,t=10,p=8$y6MyexqkgrHwKtASB6gGJQ$wq4P5k5+Aa1762AFrkLSH+9vJr3ScNoBf2lqqUSJt34'
>>> |
```

Copy the generated password.

2. Paste the generated password in the file

`/home/ubuntu/.jupyter/jupyter_notebook_config.py` . (Line 412)

```
403 ## Hashed password to use for web authentication.
404 #
405 #         To generate, type in a python/IPython shell:
406 #
407 #         from notebook.auth import passwd; passwd()
408 #
409 #         The string should be of the form type:salt:hashed-
410 # password.
411 # Default: ''
412 c.NotebookApp.password = 'argon2:$argon2id$v=19$m=10240,t=10,p=8$y6MyexqkgrHwKtASB6gGJQ$wq4P5k5+Aa1762AFrkLSH+9vJr3ScNoBf2lqqUSJt34'
413
```

4. Setup SSL

a. Generate the key in `~/jupyter` (ras needs to be 2048)

```
sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout mycert.pem -out mycert.pem
```

```

ubuntu@haodong-zhao-temp:~/jupyter$ sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout mycert.pem -out mycert.pem
Generating a RSA private key
.....+++++
.....+++++
writing new private key to 'mycert.pem'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:SE
State or Province Name (full name) [Some-State]:UPPSALA
Locality Name (eg, city) []:
Organization Name (eg, company) [Internet Widgits Pty Ltd]:
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:
Email Address []:

```

b. chown the permissions.

```
sudo chown ubuntu:ubuntu mycert.pem
```

```

ubuntu@haodong-zhao-temp:~/jupyter$ sudo chown ubuntu:ubuntu mycert.pem
ubuntu@haodong-zhao-temp:~/jupyter$ ll
total 72
drwx----- 2 ubuntu ubuntu 4096 Mar  7 19:16 ./
drwxr-xr-x  8 ubuntu ubuntu 4096 Mar  7 19:09 ../
-rw-rw-r--  1 ubuntu ubuntu 54232 Mar  7 19:08 jupyter_notebook_config.py
-rw-rw-r--  1 ubuntu ubuntu   26 Mar  7 19:16 migrated
-rw-----  1 ubuntu ubuntu 2941 Mar  7 19:15 mycert.pem

```

c. Set the path of the certfile and keyfile in

```
/home/ubuntu/.jupyter/jupyter_notebook_config.py .
```

```

159  ## The full path to an SSL/TLS certificate file.
160  #  Default: ''
161  c.NotebookApp.certfile = '/home/ubuntu/.jupyter/mycert.pem'
162

```

```

319  ## The full path to a private key file for usage with SSL/TLS.
320  #  Default: ''
321  c.NotebookApp.keyfile = '/home/ubuntu/.jupyter/mycert.pem'
322

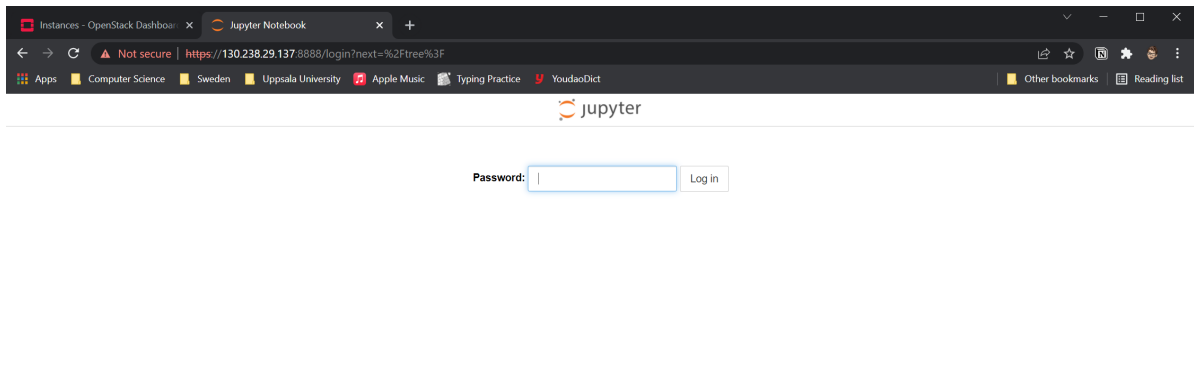
```

5. Start Jupyter notebook

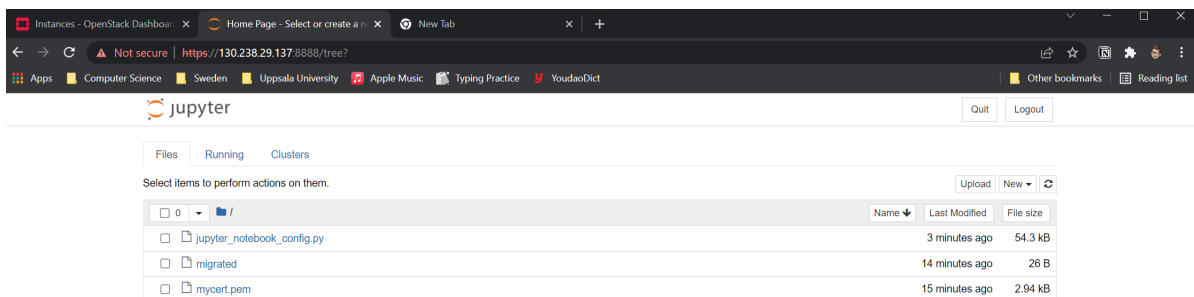
```
jupyter notebook --ip=* --no-browser
```

```
ubuntu@haodong-zhao-temp:~/jupyter$ jupyter notebook --ip=* --no-browser
[I 19:30:14.611 NotebookApp] Serving notebooks from local directory: /home/ubuntu/.jupyter
[I 19:30:14.612 NotebookApp] Jupyter Notebook 6.4.8 is running at:
[I 19:30:14.612 NotebookApp] https://haodong-zhao-temp:8888/
[I 19:30:14.612 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
```

Replace the `localhost` or your hostname with your floating IP.



6. login successfully



Good luck!