

YuantaSparkAPI – Linux 環境建置(Ubuntu24.04)

1. 系統套件更新:

開啟命令列 -> sudo apt update -> 輸入密碼

```
yuanta@yuanta-VirtualBox:~/Desktop$ sudo apt update  
[sudo] password for yuanta:
```

開啟命令列 -> sudo apt upgrade -y

```
yuanta@yuanta-VirtualBox:~/Desktop$ sudo apt upgrade -y
```

2. 安裝 dotnet sdk(24.04 已不支援 dotnet6)

sudo apt-get install dotnet-sdk-8.0

```
yuanta@yuanta-VirtualBox:~/Desktop$ sudo apt-get install dotnet-sdk-8.0  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  aspnetcore-runtime-8.0 aspnetcore-targeting-pack-8.0  
  dotnet-apphost-pack-8.0 dotnet-host-8.0 dotnet-hostfxr-8.0  
  dotnet-runtime-8.0 dotnet-targeting-pack-8.0  
  dotnet-templates-8.0 liblttng-ust-common1t64  
  liblttng-ust-ctl5t64 liblttng-ust1t64  
  netstandard-targeting-pack-2.1-8.0  
The following NEW packages will be installed:  
  aspnetcore-runtime-8.0 aspnetcore-targeting-pack-8.0
```

3. 安裝 python3 -> sudo apt install python3 (Ubuntu24.04 已內建)

```
yuanta@yuanta-VirtualBox:~/Desktop$ sudo apt install python3  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
python3 is already the newest version (3.12.3-0ubuntu2).  
python3 set to manually installed.  
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.  
yuanta@yuanta-VirtualBox:~/Desktop$
```

4. 安裝 python3 套件管理工具 -> `sudo apt install python3-pip` -> Y

```
yuanta@yuanta-VirtualBox:~/Desktop$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu libbinutils libctf-nobfd0
  libctf0 libgprofng0 libsframe1 make python3-setuptools python3-wheel
Suggested packages:
  binutils-doc gprofng-gui make-doc python-setuptools-doc
Recommended packages:
  build-essential python3-dev
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu libbinutils libctf-nobfd0
  libctf0 libgprofng0 libsframe1 make python3-pip python3-setuptools
  python3-wheel
0 upgraded, 12 newly installed, 0 to remove and 0 not upgraded.
Need to get 6298 kB of archives.
After this operation, 29.5 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

5. 確認安裝狀況 -> `python3 --version` / `pip3 --version`

```
yuanta@yuanta-VirtualBox:~/Desktop$ python3 --version
Python 3.12.3
yuanta@yuanta-VirtualBox:~/Desktop$ pip3 --version
pip 24.0 from /usr/lib/python3/dist-packages/pip (python 3.12)
```

6. 安裝 pythonnet 套件

因內建 python 的 PEP668 限制無法直接透過 `pip install` 安裝 pythonnet, 需要
先建立虛擬環境 `venv`:

`sudo apt install python3.12-venv`

`python3 -m venv myenv`

`source myenv/bin/activate`

進入 myenv 環境

```
(myenv) yuanta@yuanta-VirtualBox:~/Desktop$
```

安裝 pythonnet 套件 `pip install pythonnet`

```

Collecting pycparser (from cffi>=1.17->clr_loader<0.3.0,>=0.2.7->pythonnet)
  Downloading pycparser-2.22-py3-none-any.whl.metadata (943 bytes)
  Downloading pip-25.0.1-py3-none-any.whl (1.8 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 1.8/1.8 MB 20.1 MB/s eta 0:00:00
  Downloading pythonnet-3.0.5-py3-none-any.whl (297 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 297.5/297.5 kB 18.0 MB/s eta 0:00:00
  Downloading clr_loader-0.2.7.post0-py3-none-any.whl (50 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 50.6/50.6 kB 4.7 MB/s eta 0:00:00
  Downloading cffi-1.17.1-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.w
hl (479 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 479.4/479.4 kB 20.7 MB/s eta 0:00:00
  Downloading pycparser-2.22-py3-none-any.whl (117 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 117.6/117.6 kB 12.4 MB/s eta 0:00:00
Installing collected packages: pycparser, pip, cffi, clr_loader, pythonnet
  Attempting uninstall: pip
    Found existing installation: pip 24.0
    Uninstalling pip-24.0:
      Successfully uninstalled pip-24.0
Successfully installed cffi-1.17.1 clr_loader-0.2.7.post0 pip-25.0.1 pycparser-2
.22 pythonnet-3.0.5
(myenv) yuanta@yuanta-VirtualBox:~/Desktop$

```

7. 執行 python 進行測試

1. 進入 myenv 環境 -> source myenv/bin/activate
2. 執行測試 python 腳本

```

yuanta@yuanta-VirtualBox: ~/Desktop
yuanta@yuanta-VirtualBox:~/Desktop$ source myenv/bin/activate
(myenv) yuanta@yuanta-VirtualBox:~/Desktop$ python /home/yuanta/YuantaOneAPI_Lin
uxPython/YSendOrder.py
strIndex:
##=====##
交易主機Is Connected!!

```

版本

Python 3.12.3

Pythonnet 3.0.5

Dotnet 8.0.112

Openssl 3.0.13