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Deploy the app on the VPS

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- Connect to the VPS via SSH
- If a python version is already installed (v3.10) remove it:

sudo apt-get remove python3 -y
sudo apt-get remove --auto-remove python3 -y
sudo apt-get purge python3 -y
sudo apt-get purge --auto-remove python3 -y

- Install Python 3.8 (version 3.8 is recommended due to ta-lib & backtrader incompatibilities issues):

```
apt update
apt upgrade
sudo apt install ca-certificates apt-transport-https software-properties-common lsb-release -y
sudo gpg --list-keys
#This whole one is a commande
sudo gpg --no-default-keyring --keyring /usr/share/keyrings/deadsnakes.gpg --keyserver
keyserver.ubuntu.com --recv-keys F23C5A6CF475977595C89F51BA6932366A755776

#This whole one is a commande
echo "deb [signed-by=/usr/share/keyrings/deadsnakes.gpg]
https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu $(lsb_release -cs) main" | sudo tee
/etc/apt/sources.list.d/python.list


sudo apt update
sudo apt install python3.8 -y
sudo apt install python3.8-dev -y
```

- To check if the appropriate version of python is installed run:

```
python3.8 --version
```

- Install PIP for python 3.8

```
sudo apt install python3.8-distutils -y
curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py
python3.8 get-pip.py
```

- Install the required python packages for server

```
pip3 install wheel
pip3 install --ignore-installed flask
pip3 install --ignore-installed gunicorn
```

- Populate server directory with project files //enter the 2 steps below

sudo mkdir -p /var/www/trade
cd /var/www/trade
mkdir logs

- Transfer all project files to this directory (or clone the repository if found)
- Dedidated section for Legacy ta-lib: To install this lib you should follow the following steps:

cd /var/www/trade
wget http://prdownloads.sourceforge.net/ta-lib/ta-lib-0.4.0-src.tar.gz
tar -xzf ta-lib-0.4.0-src.tar.gz
cd ta-lib/
./configure --prefix=/usr
make
sudo make install

- If all the prev steps went correctly, export env variable:

cd /var/www/trade/
export TA_LIBRARY_PATH=/var/www/trade/ta-lib/lib

- and then ..... install the ta-lib:

pip install TA-Lib

- Install All project related packages

pip3 install flask flask-socketio
pip3 install gevent-websocket eventlet
pip3 install flask-paginate
pip3 install websocket-client
pip3 install pymongo
pip3 install cffi
pip3 install pandas pandas-ta yfinance
pip3 install APScheduler
pip3 install scrapy crochet
pip3 install python-binance

#This whole one is a command
pip3 install
git+https://github.com/mementum/backtrader.git@0fa63ef4a35dc53cc7320813f8b15480c8f85517

pip3 install matplotlib==3.2.2

#chatgpt installation
pip3 install openai
pip3 install transformers
pip3 install plotly==5.14.1
pip3 install -U scikit-learn
pip3 install pytorch-transformers
pip3 install torchvision
pip3 install scipy
pip3 install tiktoken
pip3 install -U Werkzeug

- Finally run the server

gunicorn --bind 0.0.0.0:5000 --log-file='./logs/server.log' wsgi:app

- To stop the server, kill it process by running:
pkill -f gunicorn
pkill gunicorn

Temp mongoDB credentials
echo "MongoDB email : modif15595@youke1.com"
echo "MongoDB password : nicolas2023"
echo "MongoDB user username : nico"
echo "MongoDB user password : Wpu7FK6SEaOkK5mY"
echo "MongoDB connect string : mongodb+srv://nico:Wpu7FK6SEaOkK5mY@cluster0.hfbbtfi.mongodb.net/?retryWrites=true&w=majority"

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Indicators list

https://www.backtrader.com/docu/indautoref/
https://github.com/twopirllc/pandas-ta