INSTALL HUMMINGBOT
on Mac OS M1

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Version : 1.1

Preferred solution for development : (I)
Preferred solution for trading : encapsulate in a Docker image (III)

I. Mac OS Silicon / Native source code (preferred way)

Install Conda for Mac OS Silicon
```
$ brew install miniforge
or
$ conda update -n base -c defaults conda
```

Install source code of Hummingbot :

1) Clone Hummingbot repo
```
$ git clone https://github.com/hummingbot/hummingbot.git
Or
$ git clone
git@gitlab.nekotal.tech:market-making/quantitative/humming-bot.
git
```

2) Navigate into the hummingbot folder
```
$ cd humming-bot
```

3) Init zsh
```
$ conda init zsh
```

3) Run install script
```
$ ./install_aarch64
$ conda update -n base -c defaults conda
```

4) Search for hummingbot environment

```
$ conda info —-envs
```

    a. If the environment is empty like here :

```
# conda environments:
#                         /Users/johndoe/opt/anaconda3/envs/hummingbot
base                *  /opt/homebrew/Caskroom/miniforge/base
```

Then type :

```
$ conda activate $HOME/opt/anaconda3/envs/hummingbot
```

    b. Or if you have

```
# conda environments:
#                         /Users/johndoe/opt/anaconda3/envs/hummingbot
base                *  /opt/homebrew/Caskroom/miniforge/base
```

Then type :

```
$ conda activate hummingbot
```

5) Compile
```
./compile
```

6) Run Hummingbot
```
bin/hummingbot.py
```

II. MAC OS Silicon with a UTM Virtual Machine Ubuntu VM from source code

Instructions are for the open source version of Hummingbot, not for the Latoken version
Install UTM
Install Linux Ubuntu 20.04 in UTM :
https://mac.getutm.app/gallery/ubuntu-20-04
Download iso image here :
https://ubuntu.com/download/server/arm

Increase the console size to make Hummingbot usable :

```
$ sudo dpkg-reconfigure console-setup
```

Install openssl with the header files :
```
$ sudo apt-get install libssl-dev
```

Install Cython

```
$ pip install Cython
```

Install Miniconda for linux-arm :

```
$ cd $HOME
$ wget
https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-aarch64.sh
$ chmod +x Miniconda3-latest-Linux-aarch64.sh
$ ./Miniconda3-latest-Linux-aarch64.sh
```

References :

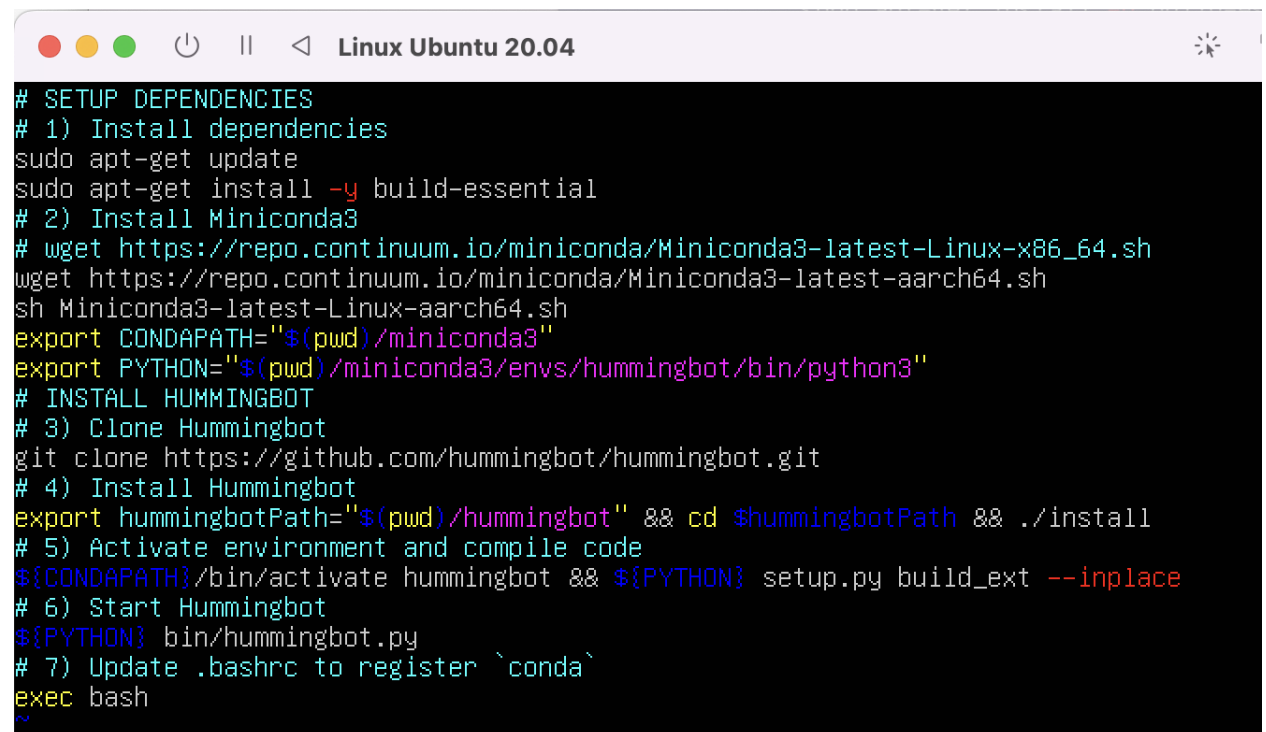https://docs.conda.io/en/master/miniconda.html

Choose: Miniconda3 Linux-aarch64 64-bit

Download hummingbot installation script into the Ubuntu VM from here :

```
$ cd $HOME
$ wget
https://raw.githubusercontent.com/CoinAlpha/hummingbot/development/installation/install-from-source/install-source-ubuntu.sh
```

Modify the `install-source-ubuntu.sh` file for aarch64 :

```
chmod a+x install-source-ubuntu.sh
```

References :

https://github.com/hummingbot/hummingbot/tree/master/installation/install-from-source

To update Hummingbot :

The `update.sh` script updates Hummingbot to the latest version. Run the following commands from the $HOME folder:

TODO : verify that update.sh has the correct miniconda aarch64 version.

```
$ wget
https://raw.githubusercontent.com/CoinAlpha/hummingbot/development/instal
lation/install-from-source/update.sh
$ chmod a+x update.sh
$ ./update.sh
```

III. Platform : Mac OS M1 / Docker

1. Install Docker via the app
2. Open a terminal :
   ```
   brew install --cask docker
   ```
3. Launch Docker app from the Mac Launchpad
4. Open a terminal :

```
# 1) Download Hummingbot install, start, and update script
curl
https://raw.githubusercontent.com/hummingbot/hummingbot/master/
installation/docker-commands/create.sh -o create.sh

curl
https://raw.githubusercontent.com/hummingbot/hummingbot/master/
installation/docker-commands/start.sh -o start.sh

curl
https://raw.githubusercontent.com/hummingbot/hummingbot/master/
installation/docker-commands/update.sh -o update.sh

# 2) Enable script permissions
```

```
chmod a+x *.sh

# 3) Create a hummingbot instance
Cd
/Users/tuannguyen/data/hummingbot/installation/docker-commands/
./create.sh
```

Source :

After step 3, Hummingboard should run and you should get this :

```
===============  CREATE A NEW HUMMINGBOT INSTANCE ===============


ℹ  Press [ENTER] for default values:

   Enter Hummingbot version you want to use [latest/development] (default
= "latest") >>>
   Enter a name for your new Hummingbot instance (default =
"hummingbot-instance") >>>
   Enter a folder name where your Hummingbot files will be saved (default
= "hummingbot_files") >>>

ℹ  Confirm below if the instance and its folders are correct:

              Instance name: hummingbot-instance
                    Version: coinalpha/hummingbot:latest


          Main folder path:
/Users/tuannguyen/Downloads/hummingbot_files
               Config files: ├──
/Users/tuannguyen/Downloads/hummingbot_files/hummingbot_conf
                  Log files: ├──
/Users/tuannguyen/Downloads/hummingbot_files/hummingbot_logs
       Trade and data files: ├──
/Users/tuannguyen/Downloads/hummingbot_files/hummingbot_data
              Scripts files: ├──
/Users/tuannguyen/Downloads/hummingbot_files/hummingbot_scripts
                 Cert files: └──
/Users/tuannguyen/Downloads/hummingbot_files/hummingbot_certs

   Do you want to proceed? [Y/N] >>> Y

Creating Hummingbot instance ... Admin password may be required to set
the required permissions ...
```

After exiting the container, rerunning it can be done only if the previous one is removed :

```
$ docker ps -a
CONTAINER ID    IMAGE                             COMMAND
CREATED         STATUS                    PORTS
NAMES
b20b1fba8e3c    coinalpha/hummingbot:latest    "/bin/bash -lc
'/hom…"    7 hours ago    Exited (0) 4 minutes ago
hummingbot-instance
37cdd8fac7c5    docker/getting-started
"/docker-entrypoint.…"    7 hours ago    Up 7 hours
0.0.0.0:80->80/tcp    gallant_margulis

$ docker rm b20b1fba8e3c
$ ./create.sh
```