Hummingbot OceanEx Fork Version User Guide

Version 0.5

2020.08.07

1. Introduction

1.1. Overview

Hummingbot is an open-source project aimed to help users, traders and exchanges to build different trading strategies and run those strategies on the top of cryptocurrency exchange platforms.

The Hummingbot source code can be downloaded through Hummingbot official github project. The full details of documentation is available from Hummingbot official website.

1.2. OceanEx Fork Version

Hummingbot supports a few number of exchanges. OceanEx was not a part of them. To enable trading through Hummingbot, OceanEx decided to fork from 0.29.0 version of Hummingbot and implemented the OceanEx connector. OceanEx published their own fork Hummingbot version at github, see the link.

This User Guide would like to provide the detailed instruction on how to run HummingBot OceanEx Fork version to connect to and trade on OceanEx Exchange.

1.3. Documentation History

Version	Date	Author	Description
0.1	March 20th 2020	Technology	Initial version
0.2	June 8th 2020	Technology	Add more details of Windows installation.section 2.2.3
0.3	June 10th 2020	Technology	Update windows installation guide at section 2.2.3

0.4	June 15th 2020	Technology	Update section 3.1.6 for private_key setup path note. Update section 5 for submitting questions
0.5	August 7th 2020	Technology	OceanEx Hummingbot fork version is upgraded to 0.29.0

2. Installation

2.1. Overview

Installing Hummingbot is simple. The **original version** of Hummingbot supports installation with executable files in .exe format for Windows and .dmg format for MacOS. Refer to the Hummingbot installation link. However, the OceanEx fork version of Hummingbot **DOES NOT** have Windows and MacOS installation executable files. It only supports installation via **Docker** and **Source** build.

2.2. Docker

2.2.1. Linux Installation Using Docker

2.2.1.1. Ubuntu

Step 1: Install Docker

Skip those Linux steps if you already have docker installed. Run the following commands:

```
# 1) Download Docker install script
```

```
wget
https://raw.githubusercontent.com/CoinAlpha/hummingbot/development/installa
tion/install-docker/install-docker-ubuntu.sh

# 2) Enable script permissions
chmod a+x install-docker-ubuntu.sh

# 3) Run installation
./install-docker-ubuntu.sh
```

Step 2: Install Hummingbot

Run the following commands:

```
# 1) Download Hummingbot install, start, and update script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/create.sh

wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/start.sh

# 2) Enable script permissions
chmod a+x *.sh

# 3) Create a hummingbot instance
./create.sh
```

2.2.1.2. Debian

Step 1: Install Docker

Skip those Linux steps if you already have docker installed. Run the following commands:

```
# 1) Download Docker install script
wget
https://raw.githubusercontent.com/CoinAlpha/hummingbot/development/installation/ins
tall-docker/install-docker-debian.sh
```

```
# 2) Enable script permissions
chmod a+x install-docker-debian.sh

# 3) Run installation
./install-docker-debian.sh
```

Step 2: Install Hummingbot

```
# 1) Download Hummingbot install, start, and update script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/create.sh

wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/start.sh

# 2) Enable script permissions
chmod a+x *.sh

# 3) Create a hummingbot instance
./create.sh
```

2.2.1.3. CentOS

Step 1: Install Docker

Skip those Linux steps if you already have docker installed. Run the following commands:

```
# 1) Download Docker install script
wget
https://raw.githubusercontent.com/CoinAlpha/hummingbot/development/installa
tion/install-docker/install-docker-centos.sh

# 2) Enable script permissions
chmod a+x install-docker-centos.sh

# 3) Run installation
./install-docker-centos.sh
```

Step 2: Install Hummingbot

```
# 1) Download Hummingbot install, start, and update script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/create.sh
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/start.sh


# 2) Enable script permissions
chmod a+x *.sh

# 3) Create a hummingbot instance
./create.sh
```

2.2.2. MacOS Installation Using Docker

Step 1: Install Docker

Install docker from the official page.

Step 2: Install Hummingbot

```
# 1) Download Hummingbot install script
curl
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/do
cker-commands/create.sh -o create.sh

# 2) Enable script permissions
chmod a+x create.sh

# 3) Run installation
./create.sh
```

2.2.3. Windows Installation Using Docker

Step 1: Install Docker

Install Docker Toolbox from this guide. And please **only** follow the guide for **Step 1. Install Docker Toolbox**. Stop at **Step 2** and use the guide as below.

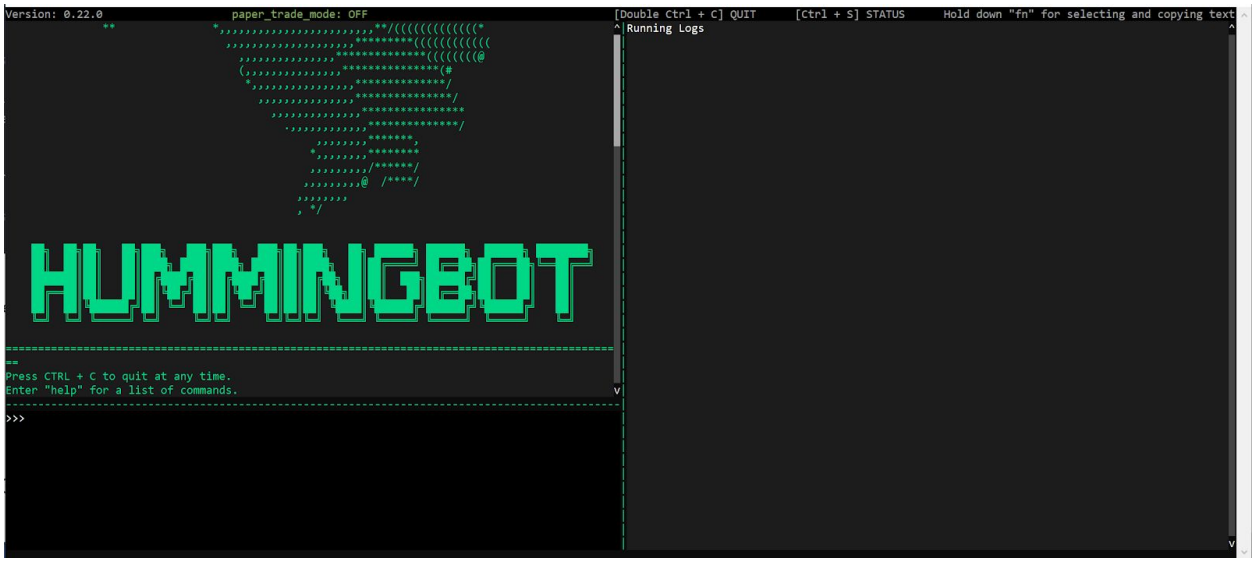
Step 2: Install Hummingbot

Open Docker Quickstart Terminal 

. Enter following commands in the terminal

```
# 1) Navigate to root folder
cd ~

# 2) Download Hummingbot install script
curl
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/docker-com
mands/create.sh -o create.sh

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


# 3) Enable script permissions
chmod a+x create.sh
chmod a+x start.sh

# 4) Run installation
./create.sh
```

Once complete, you should see below



Step 2: Re-run Hummingbot

If you quit from hummingbot, you can restart by script. Just simply run below.

```
./start.sh
```

2.3. Source

2.3.1. Linux Source Installation

2.3.1.1. Ubuntu

```
# 1) Download install script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/install-fr
om-source/install-source-ubuntu.sh

# 2) Enable script permissions
chmod a+x install-source-ubuntu.sh

# 3) Run installation
./install-source-ubuntu.sh
```

2.3.1.2. Debian

```
# 1) Download install script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/install-fr
om-source/install-source-debian.sh
# 1) Download install script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/install-fr
om-source/install-source-debian.sh
# 2) Enable script permissions
chmod a+x install-source-debian.sh

# 3) Run installation
./install-source-debian.sh
```

2.3.1.3. CentOS

```
# 1) Download install script
wget
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/install-fr
om-source/install-source-centos.sh

# 2) Enable script permissions
chmod a+x install-source-centos.sh

# 3) Run installation
./install-source-centos.sh
```

2.3.2. MacOS Source Installation

Refer to Humingbot origin link to install env in Part 1 section.

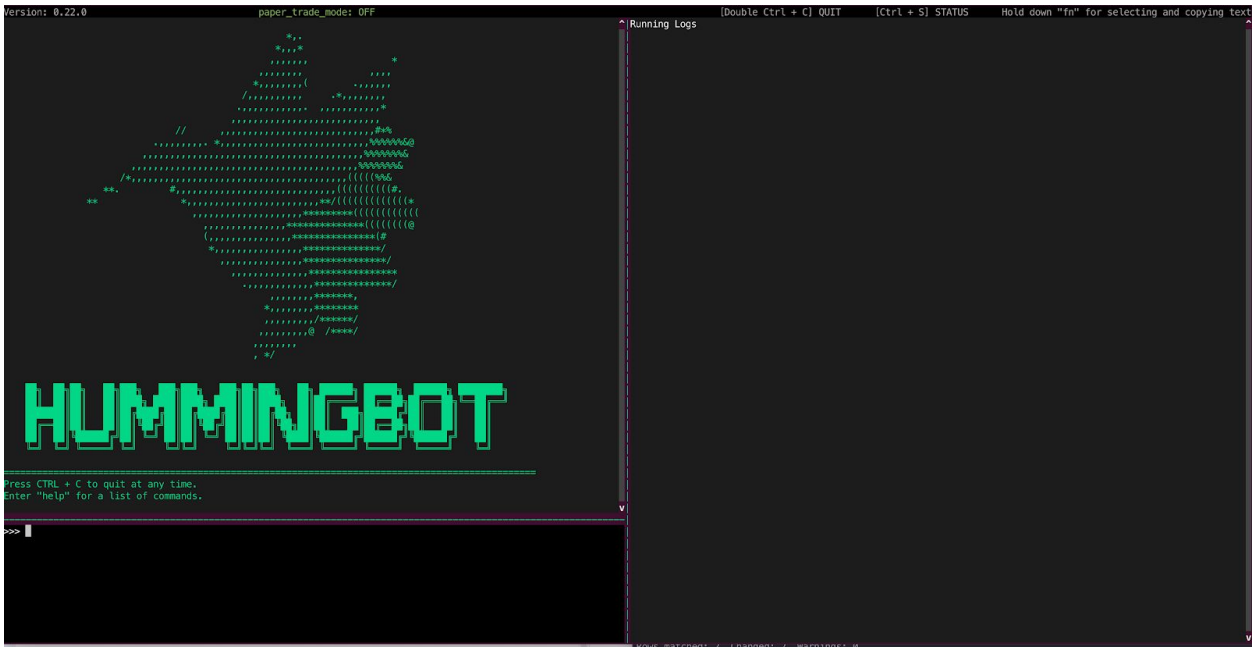
When installing Part 2, please replaced with following scripts.

```
# 1) Download Hummingbot install script
curl
https://raw.githubusercontent.com/OceanEx/hummingbot/master/installation/in
stall-from-source/install-source-macOS.sh -o install-source-macOS.sh

# 2) Enable script permissions
chmod a+x install-source-macOS.sh

# 3) Run installation
./install-source-macOS.sh
```

3. Config

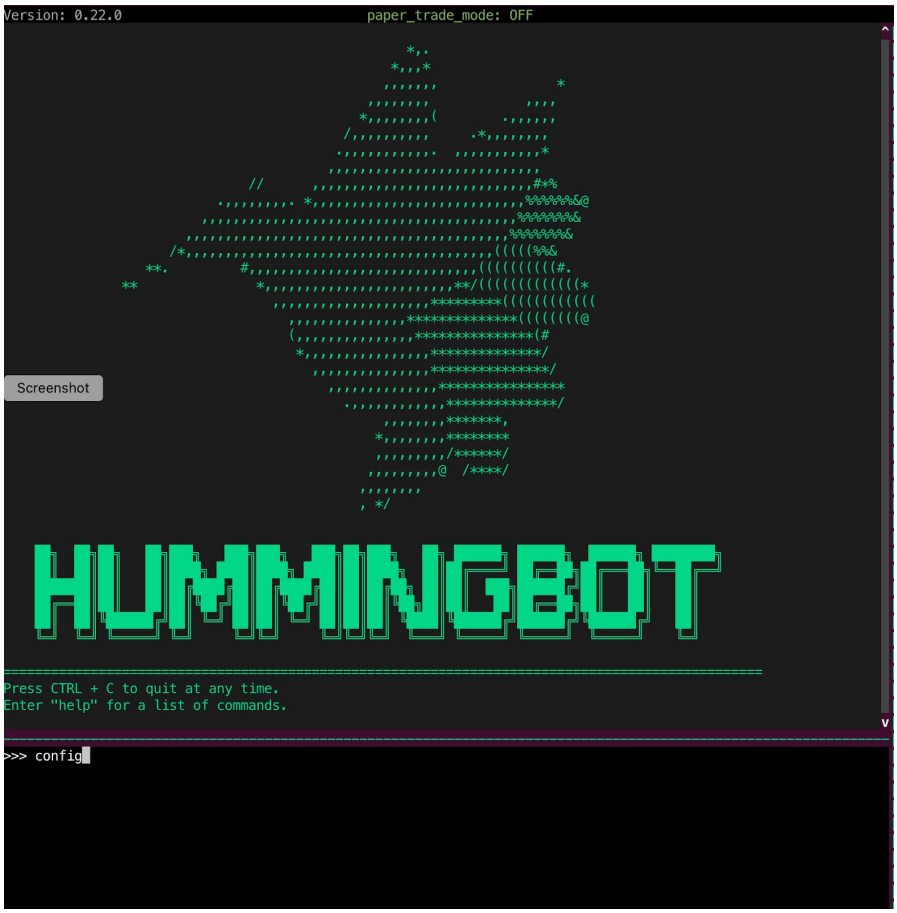
3.1. Configure a market making bot

If you are able to pass through above installation steps, you should see the Hummingbot interface as below.



3.1.1. Create a new configuration

Enter config into the command line



3.1.2. Create a new password

Create your password

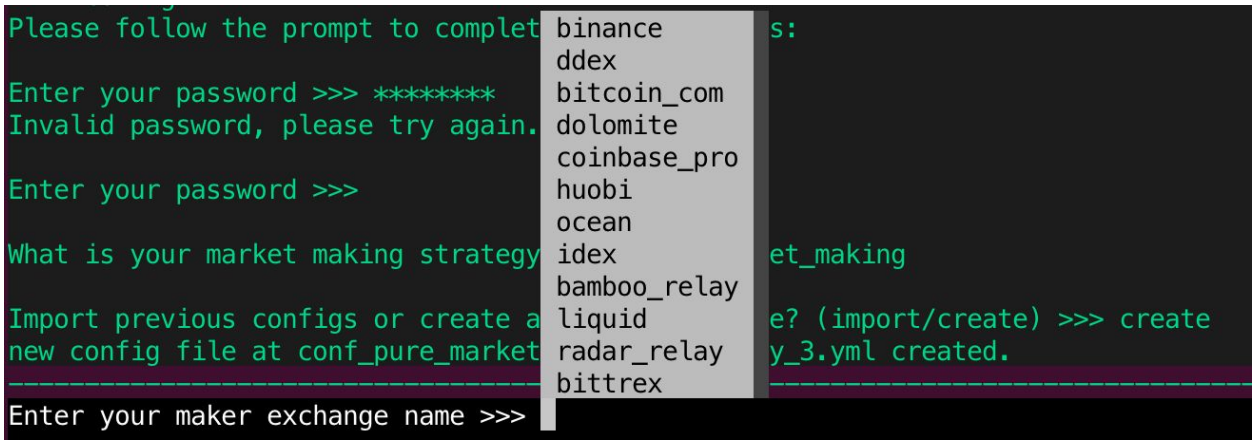
```
>>> config

Enter your password >>> *****

Please reenter your password >>> *****
```

3.1.3. Chose strategy

Next, we will create pure market making strategy

```
What is your market making strategy >>>
pure_market_making

Import previous configs or create a new config file? (import/create) >>>
create
```

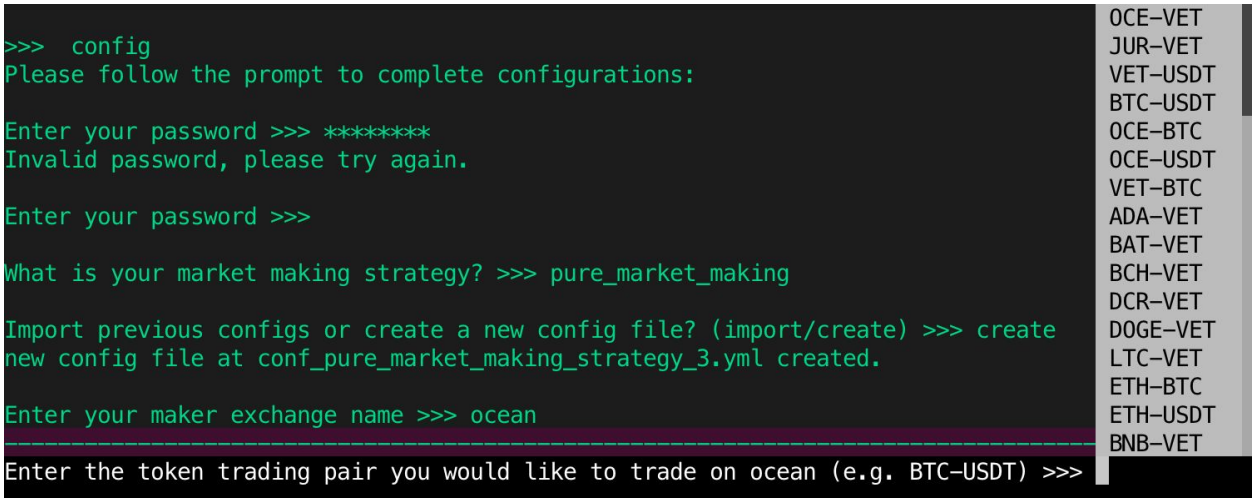
3.1.4. Chose OceanEx Exchange Connector




```
Enter your maker exchange name >>>
ocean
```

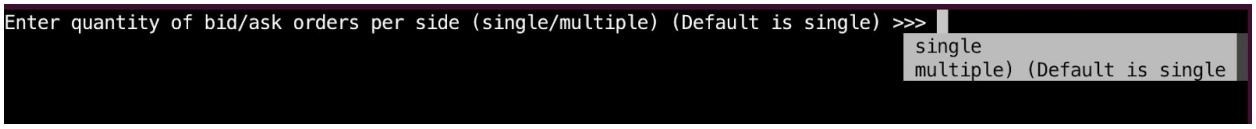
3.1.5. Chose trading pair and order parameters

Next, select the exchange trading pair, given vtho/usdt as example




```
Enter the token symbol you would like to trade on ocean (e.g. BTC-USDT) >>>
VTHO-USDT
```

Next, decide if user want to enter only one bid and one ask order (single) or enter multiple bid/ask orders (multiple)



Let's say we chose multiple and fill the information below **as an example.**

```
How far away from the mid price do you want to place the first bid order? (Enter
0.01 to indicate 1%) >>> 0.05

How far away from the mid price do you want to place the first ask order? (Enter
0.01 to indicate 1%) >>> 0.05

How often do you want to cancel and replace bids and asks (in seconds)? (Default is
60 seconds) >>> 60

How many orders do u want to place on both sides (Default is 1)
>>> 2

What is the size of the first bid and ask order? (Default is 1)
>>> 10000

How much do u want to increase the order size for each additional orders (default
```

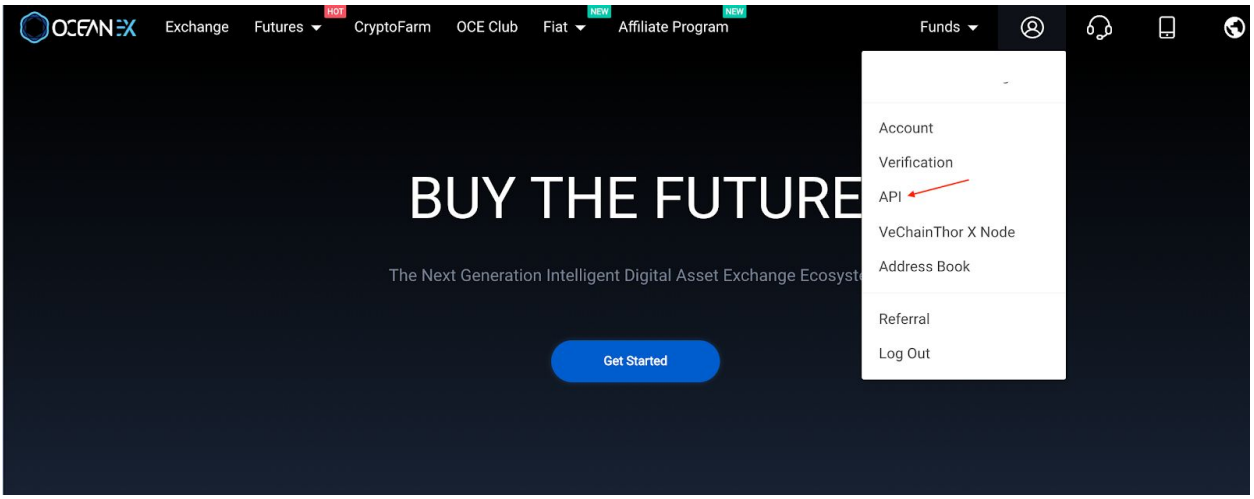
```
is 0)
>>> 1000

Enter the price increments (as percentage) for subsequent orders? (Enter 0.01 to
indicate 1%)
>>> 0.05

Would you like to enable inventory skew (y/n) (Default is no)
 >>> no
How long do you want to wait before placing the next order if your order gets
filled (in seconds) ? (Default is 10 seconds)
>>> 10

Do you want to enable order_filled_stop_cancellation ? If enabled, when orders are
completed filled, the other side remains uncancelled. (Default is False) >>> False
```

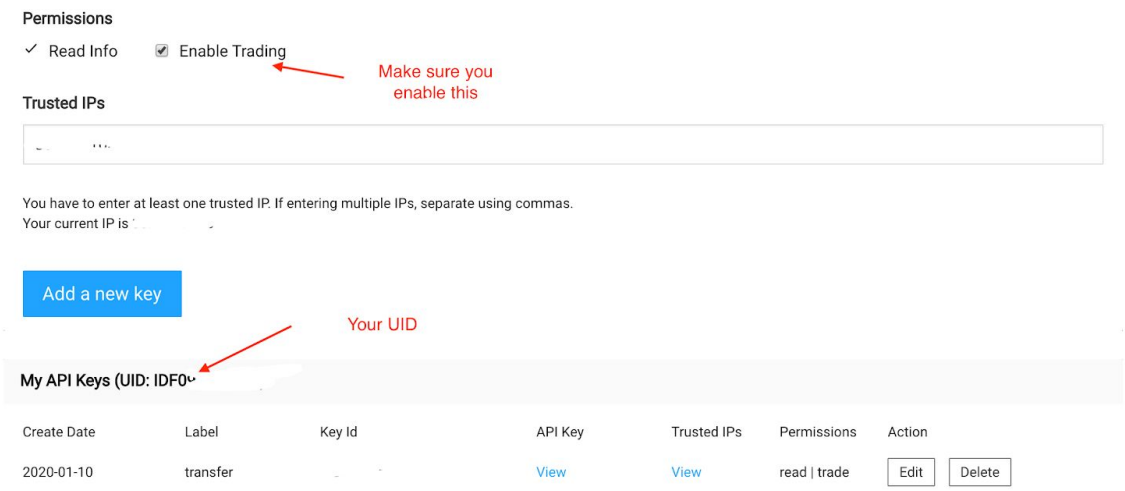
3.1.6. Connect with your OceanEx account

Enter your OceanEx uid

```
Enter your Ocean uid >>>
```

Where is my uid at OceanEx ?





Next, Enter your key file. Make sure copy your private api key (let's say file name is key.pem) to ~/hummingbot_files/hummingbot_conf directory

Note: hummingbot maps ~/hummingbot_files/hummingbot_conf to **/conf. The input for the command line must be /conf .**

```
Enter your Ocean Private key file >>> /conf/key.pem
```

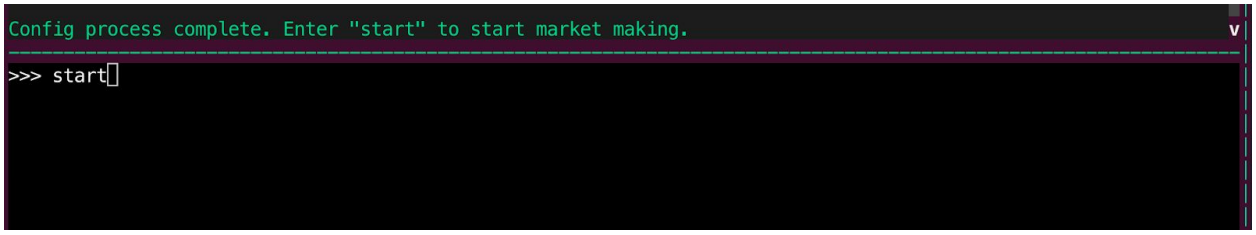
3.2. Reference

If you have any questions about details of Bot configuration. Please refer to Hummingbot official configuration instruction guide.

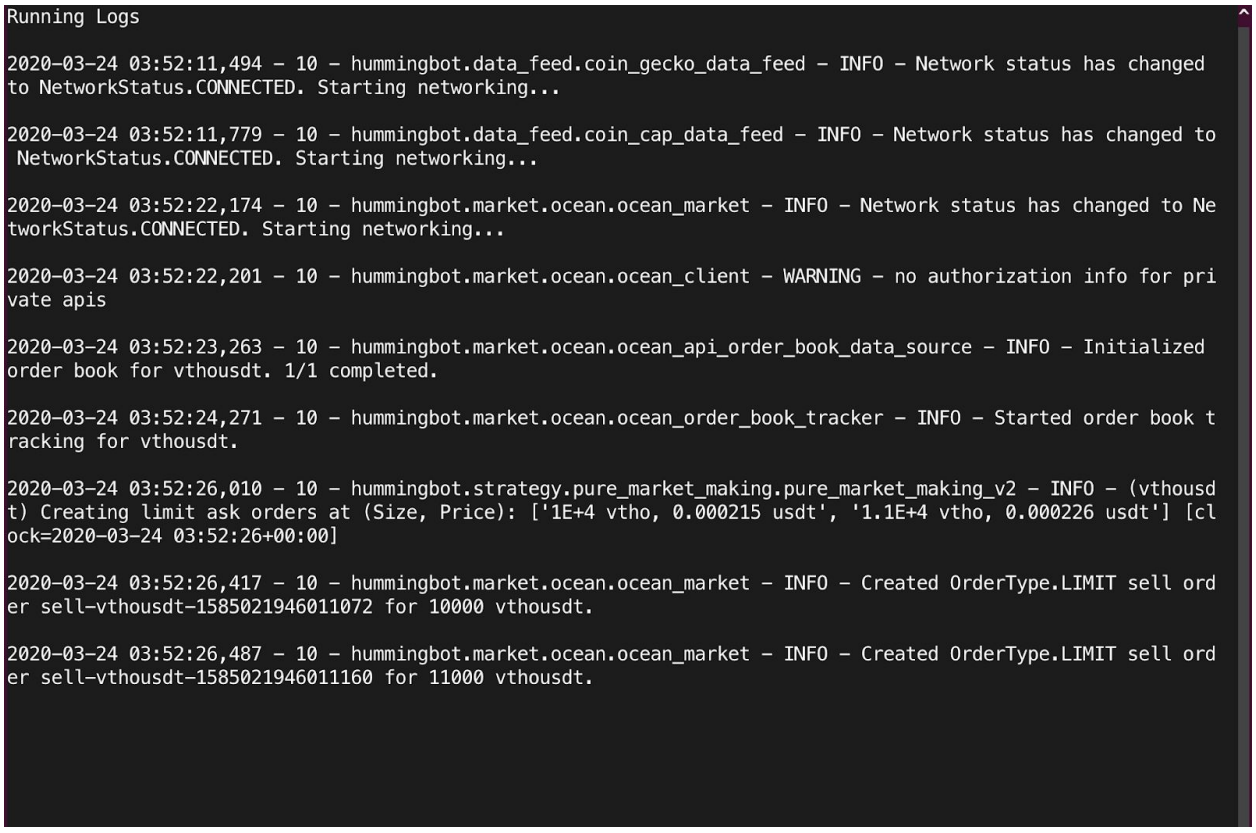
4. Run

4.1. Start your trading bot

If you pass all the configuration set up, you should see the prompt below. And simply type start to turn on the trading bot



Once started successful, you should see the logs on the right side. If it failed with errors, the error reason will both be shown at logs at right and command prompts at left .



You could review your order at OceanEx.

4.2. Performance and Statics

Please type status to check your current orders and account balance.

```
>>> status
```

```
>>>  status

 Preliminary checks:
  - Config check: Config complete
  - Market check: All markets ready

 Markets:
     Market Trading Pair  Bid Price  Ask Price  Adjusted Bid  Adjusted Ask
   0  ocean     vthousdt   0.000203   0.000207      0.000203      0.000207

 Assets:
     Market Asset  Total Balance  Available Balance  Conversion Rate
   0  ocean  vtho       48167.52           27167.52                1
   1  ocean  usdt       2.624566           2.624566                1

 Active orders:
                          Order_Id  is_buy Trading_Pair Base_Asset Quote_Asset    Price  Quantity
   0  sell-vthousdt-1585022434001934   False     vthousdt       vtho        usdt 0.000215     10000
   1  sell-vthousdt-1585022434001985   False     vthousdt       vtho        usdt 0.000226     11000
```

Please type history to check your performance.

```
>>> history
```

```
>>>  history
  No past trades in this session.

  Inventory:
      Market Asset  Starting  Current  Net_Delta  Trade_Delta Conversion_Rate
    0  ocean  VTHO  48167.52 48167.52          0            0               1
    1  ocean  USDT  2.624566 2.624566          0            0             1.0

  Market Trading Pair Performance:
      Market Trading_Pair  Start_Price  End_Price Total_Value_Delta   Profit
    0  ocean     VTHOUSDT     0.000205   0.000205   0.00000000 USDT  0.000 %

  Portfolio Performance:
    Quote Value Delta: 0.0 USDT
    Delta Percentage: 0.000 %
```

5. Support

OceanEx HummingBot is a fork version of HummingBot. For more information about how to use HummingBot, please refer to HummingBot official user doc website.

Please email questions or comments regarding this specification to OceanEx Support.