

How to install a python module in a docker container

Asked 3 years, 2 months ago Modified 3 years, 2 months ago Viewed 10k times



My Docker knowledge is very poor, I have Docker installed only because I would use freqtrade, so I followed this simple HOWTO

0



Now , all freqtrade commands run using docker , for example this



```
D:\ft_userdata\user_data>docker-compose run --rm freqtrade backtesting --config
user_data/cryptofrog.config.json --datadir user_data/data/binance --export
trades --stake-amount 70 --strategy CryptoFrog -i 5m
```

Well , I started to have problems when I would had try this strategy

<https://github.com/froggleston/cryptofrog-strategies> for freqtrade . This strategy requires Python module finta . I understood that the Python module finta should be installed in my Docker container and NOT in my Windows system (it was easy "pip install finta" from console!).

Even if I tried to find a solution over stackoverflow and google, I do no understand how to do this step (install finta python module in freqtrade container). after several hours I am really lost.

Someone can explain me in easy steps how to do this ?

Freqtrade mount point is D:\ft_userdata\user_data

python docker

Share Improve this question Follow

asked Jun 16, 2021 at 12:25



gr68

490 ● 2 ● 12 ● 25

1 Please, post your docker file. – Antonio Petricca Jun 16, 2021 at 12:26

no idea , where should I find it ? – gr68 Jun 16, 2021 at 12:30

Typically you'd whatever dependency to a `Pipfile` or `setup.py` in your source tree, using standard Python packaging tools; run `pip freeze` if needed to regenerate a `requirements.txt` file; then re-run `docker build` to get a new image. You do not generally install packages in running containers.

– David Maze Jun 16, 2021 at 13:00

3 Answers

Sorted by: Highest score (default)



You can get bash from your container with this command:

3

```
docker-compose exec freqtrade bash
```



and then:



```
pip install finta
```



OR run only one command:

```
docker-compose exec freqtrade pip install finta
```

If the above solutions didn't work, You can run `docker ps` command and get `container id` of your container. Then

```
docker exec -it CONTAINER_ID bash
pip install finta
```

Share Improve this answer Follow

edited Jun 16, 2021 at 12:52

answered Jun 16, 2021 at 12:31



Ali Irani

607 ● 4 ● 10

I tried it , it returns nothing and the problem continues. PS C:\Users\graziano> docker-compose exec freqtrade pip install finta PS C:\Users\graziano> – [gr68](#) Jun 16, 2021 at 12:33

run `docker ps` and print result here – [Ali Irani](#) Jun 16, 2021 at 12:39

D:\ft_userdata\user_data>docker ps CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES 385758e10aca freqtradeorg/freqtrade:stable "freqtrade trade --l..." 40 minutes ago Up Less than a second 127.0.0.1:8080->8080/tcp freqtrade – [gr68](#) Jun 16, 2021 at 12:43

run `docker exec -it 385758e10aca bash` and then `pip install finta` . – [Ali Irani](#) Jun 16, 2021 at 12:44

it worked however when I execute D:\ft_userdata\user_data>docker-compose run --rm freqtrade backtesting --datadir user_data/data/binance --export trades --stake-amount 70 --strategy CryptoFrog -i 5m I continue to receive the error No module named 'finta' – [gr68](#) Jun 16, 2021 at 12:48



You need to make your own docker image that has finta installed. Luckily you can build on top of the standard freqtrade docker image.

2

First make a `Dockerfile` with these two lines in it

```
FROM freqtradeorg/freqtrade:stable
RUN pip install finta
```

Then build the image (calling the new image `myfreqtrade`) by running the command

```
docker build -t myfreqtrade .
```

Finally change the docker-compose.yml file to run your image by changing the line

```
image: freqtradeorg/freqtrade:stable
```

to

```
image: myfreqtrade
```

And that should be that.

Share Improve this answer Follow

answered Jun 16, 2021 at 12:54



Hans Kilian

23.7k ● 4 ● 36 ● 49

after doing this if I pull freqtrade I receive this ERROR: for freqtrade pull access denied for myfreqtrade, repository does not exist or may require 'docker login': denied: requested access to the resource is denied ERROR: pull access denied for myfreqtrade, repository does not exist or may require 'docker login': denied: requested access to the resource is denied – [gr68](#) Jun 18, 2021 at 10:46

What should I do to pull myfreqtrade – [gr68](#) Jun 18, 2021 at 10:47

I've never had to do anything special to be able to pull images. I think it might have to do with your Docker installation. – [Hans Kilian](#) Jun 18, 2021 at 10:50

if I use docker I receive exactly the same error . – [gr68](#) Jun 18, 2021 at 10:56

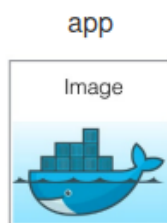
can you run the command `docker pull freqtradeorg/freqtrade:stable` without errors? If not, what error does it give? – [Hans Kilian](#) Jun 18, 2021 at 11:07

The way to get our Python code running in a container is to pack it as a Docker image and then run a container based on it.



Dockerfile

docker build app



docker run <image>

running app container



To generate a Docker image we need to create a Dockerfile that contains instructions needed to build the image. The Dockerfile is then processed by the Docker builder which generates the Docker image. Then, with a simple docker run command, we create and run a container with the Python service.

An example of a Dockerfile containing instructions for assembling a Docker image for Python service installing `finta` is the following

```
# set base image (host OS)
FROM python:3.8

# install dependencies
RUN pip install finta

# command to run on container start
CMD [ "python", "-V" ]
```

For each instruction or command from the Dockerfile, the Docker builder generates an image layer and stacks it upon the previous ones. Therefore, the Docker image resulting from the process is simply a read-only stack of different layers.

```
docker build -t myimage .
```

Then, we can check the image is in the local image store:

```
docker images
```

Please refer to the freqtrade DockerFile

<https://github.com/freqtrade/freqtrade/blob/develop/Dockerfile>

Share Improve this answer Follow

answered Jun 16, 2021 at 13:05



psorab

144 ● 1 ● 16