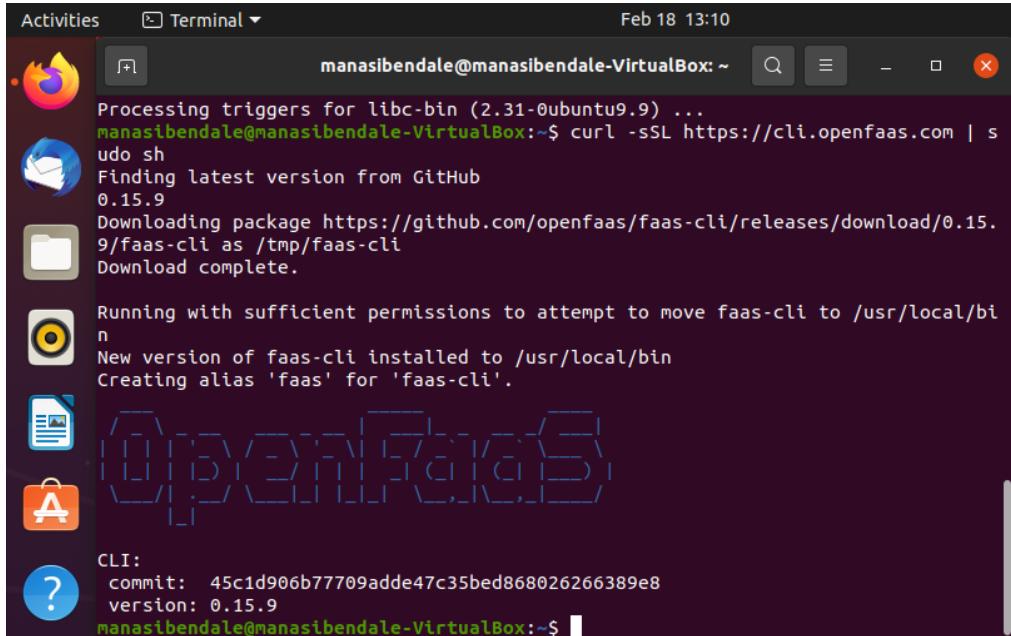


COEN241: Assignment 2 screenshots

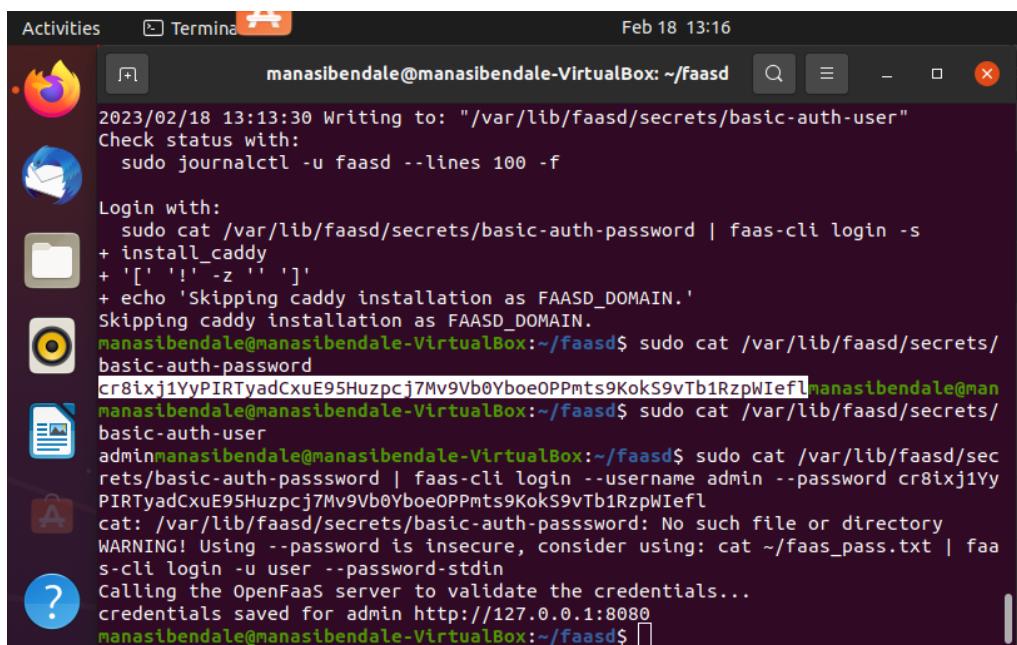
Installing OpenFaas on Ubuntu



```
Activities Terminal manasibendale@manasibendale-VirtualBox: ~ Feb 18 13:10
Processing triggers for libc-bin (2.31-0ubuntu9.9) ...
manasibendale@manasibendale-VirtualBox:~$ curl -sSL https://cli.openfaas.com | s
udo sh
Finding latest version from GitHub
0.15.9
Downloading package https://github.com/openfaas/faas-cli/releases/download/0.15.
9/faas-cli as /tmp/faas-cli
Download complete.

Running with sufficient permissions to attempt to move faas-cli to /usr/local/bi
n
New version of faas-cli installed to /usr/local/bin
Creating alias 'faas' for 'faas-cli'.
CLI:
commit: 45c1d906b77709adde47c35bed868026266389e8
version: 0.15.9
manasibendale@manasibendale-VirtualBox:~$
```

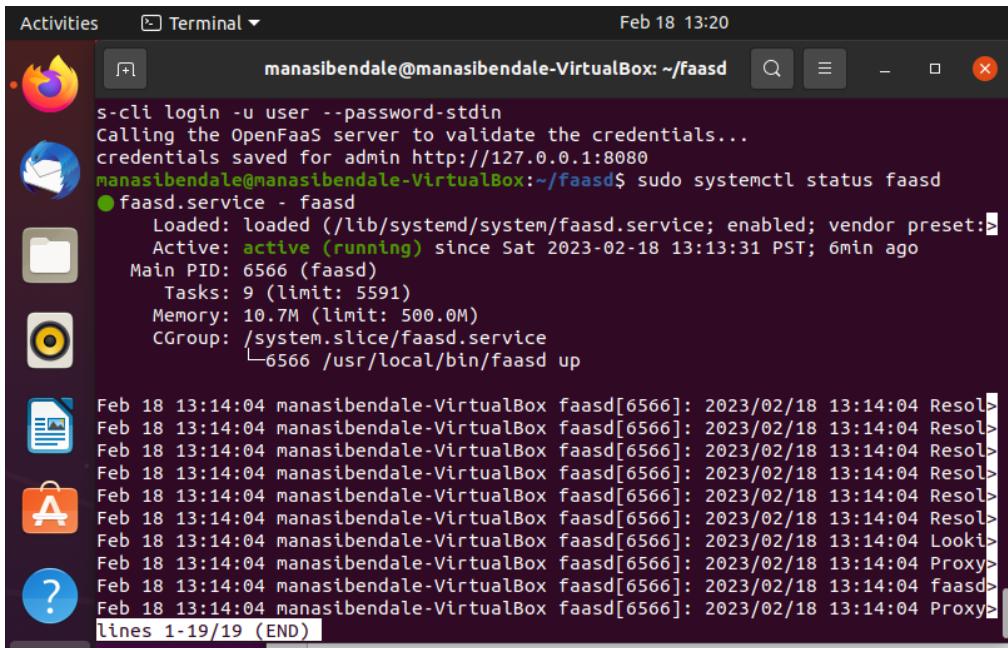
2. Getting OpenFaas CLI username and password



```
Activities Terminal manasibendale@manasibendale-VirtualBox: ~/faasd Feb 18 13:16
2023/02/18 13:13:30 Writing to: "/var/lib/faasd/secrets/basic-auth-user"
Check status with:
  sudo journalctl -u faasd --lines 100 -f

Login with:
  sudo cat /var/lib/faasd/secrets/basic-auth-password | faas-cli login -s
+ install_caddy
+ '[' '!' -z '' ']'
+ echo 'Skipping caddy installation as FAASD_DOMAIN.'
Skipping caddy installation as FAASD_DOMAIN.
manasibendale@manasibendale-VirtualBox:~/faasd$ sudo cat /var/lib/faasd/secrets/
basic-auth-password
cr8ixj1YyPIRTyadCxuE95Huzpcj7Mv9Vb0YboeOPPmts9KokS9vTb1RzpWIeflmanasibendale@man
manasibendale@manasibendale-VirtualBox:~/faasd$ sudo cat /var/lib/faasd/secrets/
basic-auth-user
adminmanasibendale@manasibendale-VirtualBox:~/faasd$ sudo cat /var/lib/faasd/sec
rets/basic-auth-passsword | faas-cli login --username admin --password cr8ixj1Yy
PIRTyadCxuE95Huzpcj7Mv9Vb0YboeOPPmts9KokS9vTb1RzpWIefl
cat: /var/lib/faasd/secrets/basic-auth-passsword: No such file or directory
WARNING! Using --password is insecure, consider using: cat ~/faas_pass.txt | faa
s-cli login -u user --password-stdin
Calling the OpenFaaS server to validate the credentials...
credentials saved for admin http://127.0.0.1:8080
manasibendale@manasibendale-VirtualBox:~/faasd$
```

3. Verify OpenFaas Installation

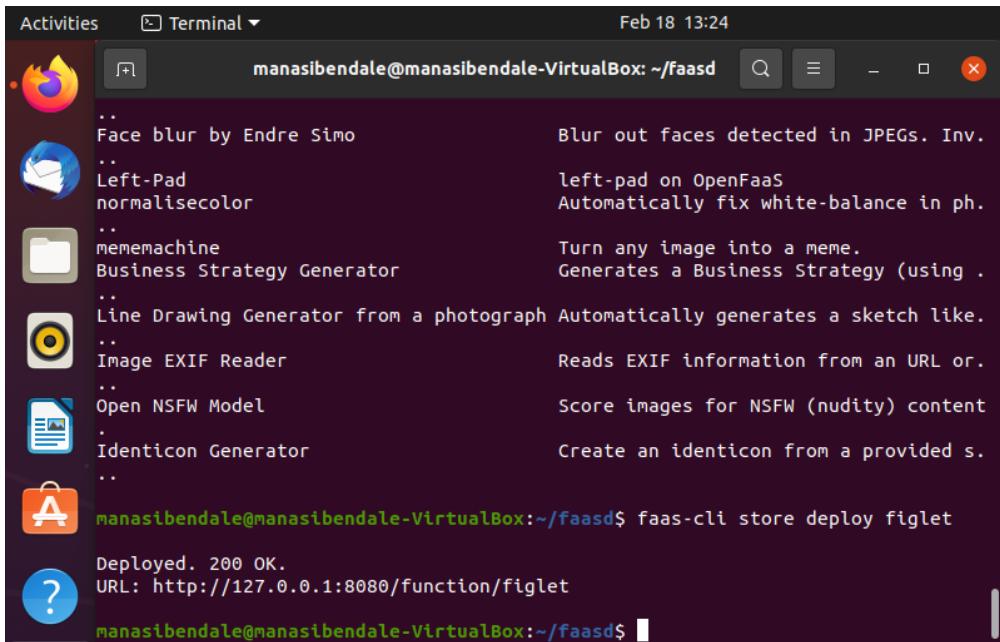


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is "Terminal" and the command prompt is "manasibendale@manasibendale-VirtualBox: ~/faasd". The terminal displays the following output:

```
s-cli login -u user --password-stdin
Calling the OpenFaaS server to validate the credentials...
credentials saved for admin http://127.0.0.1:8080
manasibendale@manasibendale-VirtualBox:~/faasd$ sudo systemctl status faasd
● faasd.service - faasd
   Loaded: loaded (/lib/systemd/system/faasd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-02-18 13:13:31 PST; 6min ago
     Main PID: 6566 (faasd)
        Tasks: 9 (limit: 5591)
       Memory: 10.7M (limit: 500.0M)
      CGroup: /system.slice/faasd.service
              └─6566 /usr/local/bin/faasd up

Feb 18 13:14:04 manasibendale-VirtualBox faasd[6566]: 2023/02/18 13:14:04 Resolving
Feb 18 13:14:04 manasibendale-VirtualBox faasd[6566]: 2023/02/18 13:14:04 Looking up
Feb 18 13:14:04 manasibendale-VirtualBox faasd[6566]: 2023/02/18 13:14:04 Proxy
Feb 18 13:14:04 manasibendale-VirtualBox faasd[6566]: 2023/02/18 13:14:04 faasd
Feb 18 13:14:04 manasibendale-VirtualBox faasd[6566]: 2023/02/18 13:14:04 Proxy
...
lines 1-19/19 (END)
```

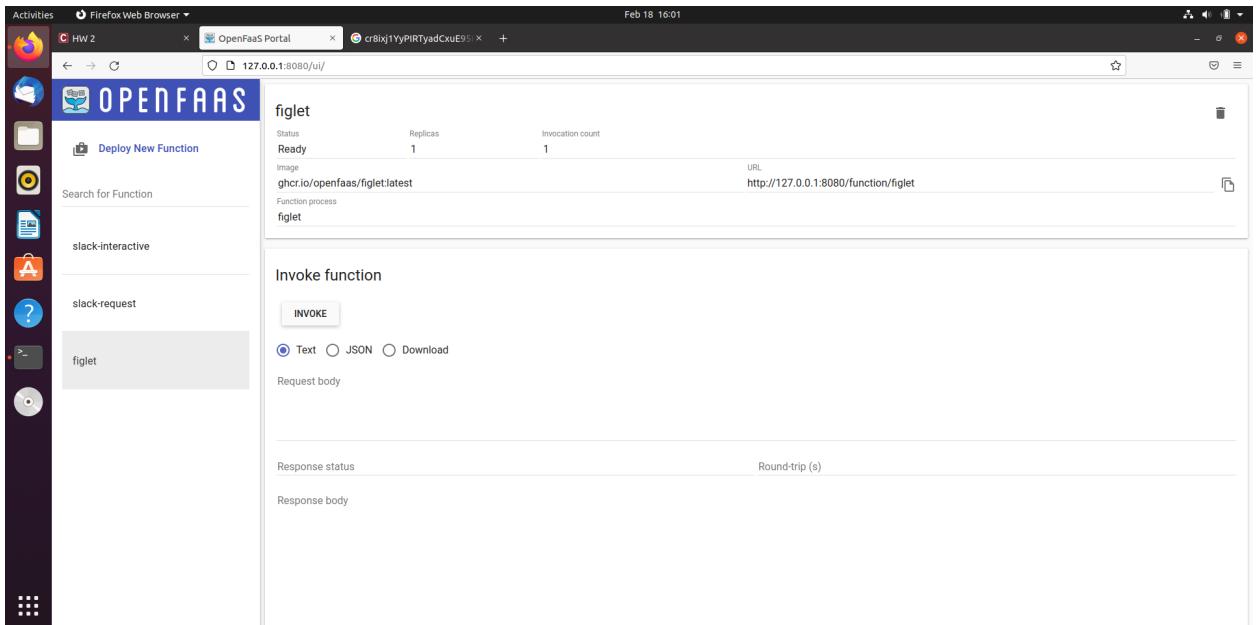
4. Deploying figlet



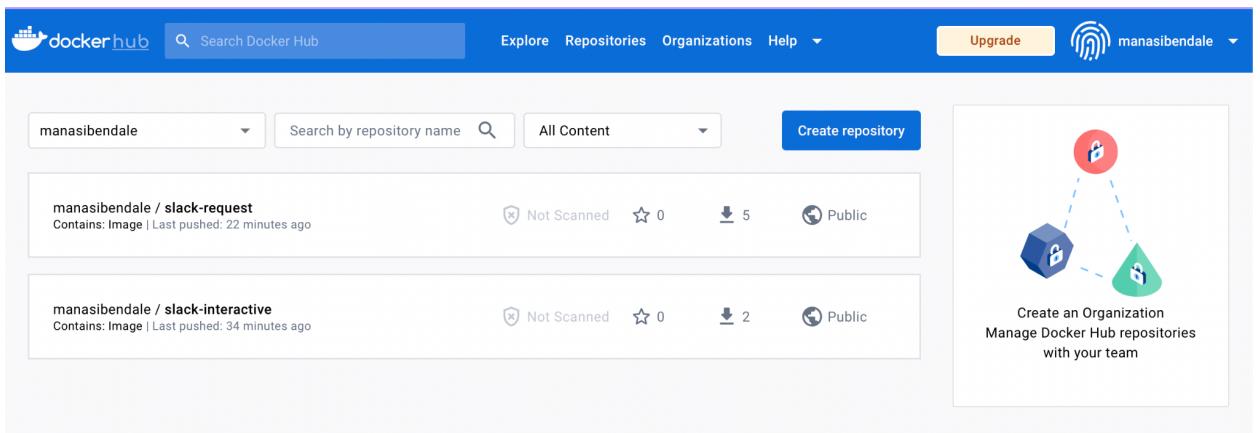
A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is "Terminal" and the command prompt is "manasibendale@manasibendale-VirtualBox: ~/faasd". The terminal displays the following output:

```
..
Face blur by Endre Simo           Blur out faces detected in JPEGs. Inv.
..
Left-Pad                           left-pad on OpenFaaS
normalisecolor                      Automatically fix white-balance in ph.
..
mememachine                         Turn any image into a meme.
Business Strategy Generator        Generates a Business Strategy (using .
..
Line Drawing Generator from a photograph  Automatically generates a sketch like.
..
Image EXIF Reader                  Reads EXIF information from an URL or.
..
Open NSFW Model                     Score images for NSFW (nudity) content
..
Identicon Generator                Create an identicon from a provided s.
..
manasibendale@manasibendale-VirtualBox:~/faasd$ faas-cli store deploy figlet
Deployed. 200 OK.
URL: http://127.0.0.1:8080/function/figlet
manasibendale@manasibendale-VirtualBox:~/faasd$
```

5. UI



6. Signing Up for dockerhub



7. Writing your own function

```
Function created in folder: slack-request
Stack file written: slack-request.yml
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli new --lang python
slack-interactive
Folder: slack-interactive created.

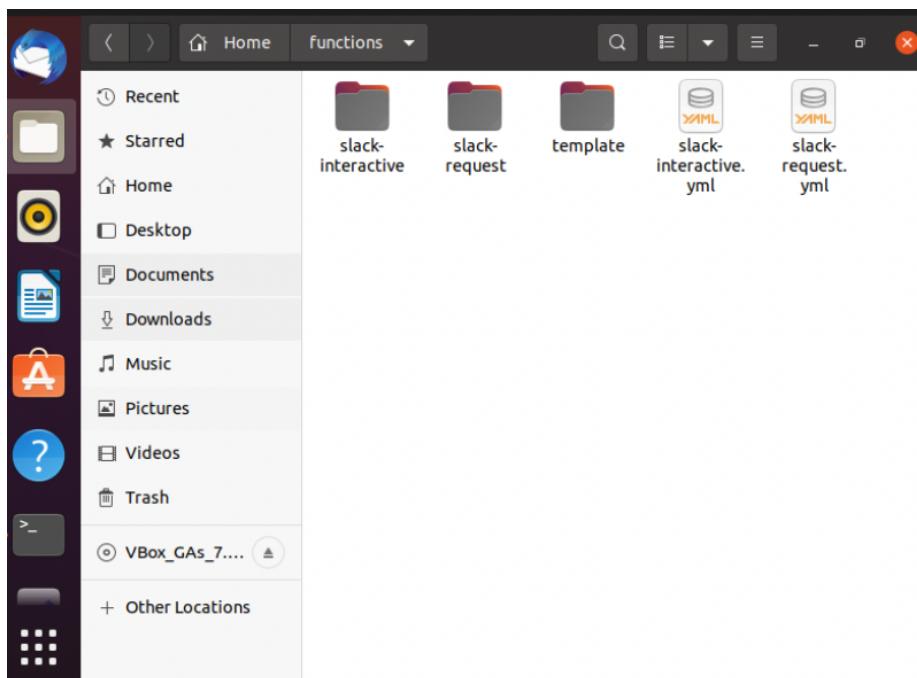
Function created in folder: slack-interactive
Stack file written: slack-interactive.yml
manasibendale@manasibendale-VirtualBox:~/functions$
```

A screenshot of a terminal window on a Linux desktop. The user has run the command 'faas-cli new --lang python' twice to create new functions named 'slack-request' and 'slack-interactive'. The terminal shows the directory structure for each function folder and the generated stack files ('slack-request.yml' and 'slack-interactive.yml').

Activities Terminal ▾ Feb 18 13:27

```
manasibendale@manasibendale-VirtualBox: ~/functions
manasibendale@manasibendale-VirtualBox:~/faasd$ mkdir -p ~/functions && cd ~/functions
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli new --lang python slack-request
2023/02/18 13:27:03 No templates found in current directory.
2023/02/18 13:27:03 Attempting to expand templates from https://github.com/openfaas/templates.git
2023/02/18 13:27:04 Fetched 17 template(s) : [csharp dockerfile go java11 java1
1-vert-x node node12 node12-debian node14 node16 node17 php7 php8 python python
3 python3-debian ruby] from https://github.com/openfaas/templates.git
Folder: slack-request created.

Function created in folder: slack-request
Stack file written: slack-request.yml
manasibendale@manasibendale-VirtualBox:~/functions$
```



8. Docker login

```

Activities Terminal ▾ manasibendale@manasibendale-VirtualBox: ~/functions Feb 18 15:29
x:///var/run/docker.sock: Post "http://%2Fvar%2Frun%2Fdocker.sock/v1.24/auth": dial unix /var/run/docker.sock: connect: permission denied
manasibendale@manasibendale-VirtualBox:~/functions$ sudo usermod -a -G docker jenkins
usermod: user 'jenkins' does not exist
manasibendale@manasibendale-VirtualBox:~/functions$ sudo usermod -a -G docker manasibendale
manasibendale@manasibendale-VirtualBox:~/functions$ grep doctor /etc/group
manasibendale@manasibendale-VirtualBox:~/functions$ sudo usermod -a -G docker manasibendale
manasibendale@manasibendale-VirtualBox:~/functions$ grep doctor /etc/group
manasibendale@manasibendale-VirtualBox:~/functions$ newgrp docker
manasibendale@manasibendale-VirtualBox:~/functions$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: manasibendale
Password:
WARNING! Your password will be stored unencrypted in /home/manasibendale/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
?
Login Succeeded
manasibendale@manasibendale-VirtualBox:~/functions$
```

9. Deploying Slack-interactive and Slack-request functions:

1. Slack-interactive build, push and deploy:

```

Activities Terminal ▾ manasibendale@manasibendale-VirtualBox: ~/functions Feb 18 15:30
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
?
Login Succeeded
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli build -f ./slack-interactive.yml
[0] > Building slack-interactive.
Clearing temporary build folder: ./build/slack-interactive/
Preparing: ./slack-interactive/ build/slack-interactive/function
Building: manasibendale/slack-interactive:latest with python template. Please wait..
Sending build context to Docker daemon 9.216kB
Step 1/31 : FROM --platform=${TARGETPLATFORM:-linux/amd64} ghcr.io/openfaas/classic-watchdog:0.2.1 as watchdog
0.2.1: Pulling from openfaas/classic-watchdog
e1749af664ff: Pulling fs layer
e1749af664ff: Verifying Checksum
e1749af664ff: Download complete
e1749af664ff: Pull complete
Digest: sha256:640de69b1d683cbfa73fd3b2d707d33a4e4570164c9795c3be028949688e5c61
Status: Downloaded newer image for ghcr.io/openfaas/classic-watchdog:0.2.1
---> 021a98fdbddd
Step 2/31 : FROM --platform=${TARGETPLATFORM:-linux/amd64} python:2.7-alpine
```

Activities Terminal ▾ Feb 18 15:31

```
c9d57c99a39f: Pushed  
292651dab6f9: Pushed  
a265fce65e25: Pushed  
f693211a785c: Pushed  
bea1b7713e07: Pushed  
91a1252697b8: Pushed  
d676a4d7e585: Pushed  
b36d83ae1491: Pushed  
879c0d8666e3: Mounted from library/python  
20a7b70bdf2f: Mounted from library/python  
3fc750b41be7: Mounted from library/python  
beee9f30bc1f: Mounted from library/python  
latest: digest: sha256:c6b94a6e28aab39f54aa952e825dabeeab5958ddb59a6bc411ef1343d  
42324b5 size: 4074  
[0] < Pushing slack-interactive [manasibendale/slack-interactive:latest] done.  
[0] Worker done.  
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli deploy -f ./slack-interactive.yml  
Deploying: slack-interactive.  
Deployed. 200 OK.  
URL: http://127.0.0.1:8080/function/slack-interactive  
manasibendale@manasibendale-VirtualBox:~/functions$
```

Activities Terminal ▾ Feb 18 15:31

```
Total build time: 34.77s  
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli push -f ./slack-interactive.yml  
[0] > Pushing slack-interactive [manasibendale/slack-interactive:latest]  
The push refers to repository [docker.io/manasibendale/slack-interactive]  
ebc3e09dd6d7: Pushed  
687c6e4bd280: Pushed  
8513ec4e8d4e: Pushed  
9be4d5759f17: Pushed  
b822bd064860: Pushed  
c9d57c99a39f: Pushed  
292651dab6f9: Pushed  
a265fce65e25: Pushed  
f693211a785c: Pushed  
bea1b7713e07: Pushed  
91a1252697b8: Waiting  
d676a4d7e585: Waiting  
b36d83ae1491: Waiting  
879c0d8666e3: Waiting  
20a7b70bdf2f: Waiting  
3fc750b41be7: Waiting  
beee9f30bc1f: Waiting
```

2. Slack-request build, push and deploy:

Activities Terminal ▾ Feb 18 15:32 manasibendale@manasibendale-VirtualBox: ~/functions

```
... -> Using cache  
... -> 9fdfc704ab2c  
Step 21/31 : COPY function/requirements.txt .  
... -> Using cache  
... -> 9bc36a936ab0  
Step 22/31 : RUN pip install -r requirements.txt --target=/home/app/python  
... -> Using cache  
... -> d622abdd4b6b2  
Step 23/31 : WORKDIR /home/app/  
... -> Using cache  
... -> 541bcb3ad96a  
Step 24/31 : USER root  
... -> Using cache  
... -> 822d04e405bb  
Step 25/31 : COPY function function  
... -> eacc49f3d4a3  
Step 26/31 : RUN chown -R app:app ./ && chmod -R 777 /home/app/python  
... -> Running in 707356457aa9  
Removing intermediate container 707356457aa9  
... -> c9fd38d9471c  
Step 27/31 : USER app  
... -> Running in cfa629f31aba  
Removing intermediate container cfa629f31aba  
... -> c5c8ff9f03d58  
Step 28/31 : ENV fprocess="python index.py"  
... -> Running in d4e960070f35  
Removing intermediate container d4e960070f35  
... -> a1af10e3e381  
Step 29/31 : EXPOSE 8080  
... -> Running in 41fdbbe039673  
Removing intermediate container 41fdbbe039673  
... -> d0f8244db295  
Step 30/31 : HEALTHCHECK --interval=3s CMD [ -e /tmp/.lock ] || exit 1  
... -> Running in 3c44cff8f258  
Removing intermediate container 3c44cff8f258  
... -> 6e6ca5034c42  
Step 31/31 : CMD ["fwatchdog"]  
... -> Running in e18ba5747df2  
Removing intermediate container e18ba5747df2  
... -> 1c9ea53077dd  
Successfully built 1c9ea53077dd  
Successfully tagged manasibendale/slack-request:latest  
Image: manasibendale/slack-request:latest built.  
[0] < Building slack-request done in 4.14s.  
[0] Worker done.  
Total build time: 4.14s  
manasibendale@manasibendale-VirtualBox:~/functions$
```

E Terminal ▾ manasibendale@manasibendale-VirtualBox: ~/functions

```
b822bd064860: Mounted from manasibendale/slack-interactive  
c9d57c99a39f: Mounted from manasibendale/slack-interactive  
292651dab6f9: Mounted from manasibendale/slack-interactive  
a265bce65e25: Mounted from manasibendale/slack-interactive  
f693211a785c: Mounted from manasibendale/slack-interactive  
bea1b7713e07: Mounted from manasibendale/slack-interactive  
91a1252697b8: Mounted from manasibendale/slack-interactive  
d676a4d7e585: Mounted from manasibendale/slack-interactive  
b36d83ae1491: Mounted from manasibendale/slack-interactive  
879c0d8666e3: Mounted from manasibendale/slack-interactive  
20a7b70bdf2f: Mounted from manasibendale/slack-interactive  
3fc750b41be7: Mounted from manasibendale/slack-interactive  
beee9f30bc1f: Mounted from manasibendale/slack-interactive  
  
latest: digest: sha256:5be2a737b560a1f04c9e88743a3ff6f86d0217c28faa053723845f3b  
b672545f size: 4075  
[0] < Pushing slack-request [manasibendale/slack-request:latest] done.  
[0] Worker done.  
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli deploy -f ./slack-request.yml  
Deploying: slack-request.  
  
Deployed. 200 OK.  
URL: http://127.0.0.1:8080/function/slack-request  
manasibendale@manasibendale-VirtualBox:~/functions$
```