

Section 3. „Build Base Images from Scratch”

Links:

<https://github.com/pythonincontainers/basescratch>

<https://wiki.debian.org/Debootstrap>

Commands:

```
$ git clone https://github.com/pythonincontainers/basescratch
$ cd basescratch
$ atom .
$ cd dev
$ docker run -it --name official3.7.3 python:3.7.3-slim bash
# pip install Flask==1.0.3
# rm -f /bin/bash /bin/dash /bin/sh /bin/rbash
# exit
$ docker export -o rootfs.tar official3.7.3
$ docker rm official3.7.3
$ docker build -t mypython3.7:official -f Dockerfile.testscratch .
$ docker run -it --rm mypython3.7:official
>> import flask
>>exit()
$ docker run -it --rm mypyhton3.7:official /bin/sh
$ docker history mypython3.7:official
$ cd ..
```

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```
$ cd basesscratch/dev
```

```
$ docker run -it --rm -v ${PWD}:/host --privileged ubuntu:16.04  
/bin/sh /host/install-xenial-build.sh
```

```
$ docker import --change "ENV  
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bi  
n" --change "CMD /usr/bin/python" build/rootfs.tar.gz  
mypython3.7:import
```

```
$ docker build -t mypython3.7:dev-xenial -f  
Dockerfile.basesscratch .
```

```
$ docker inspect mypython3.7:dev-xenial
```

```
$ docker run -it --rm -v ${PWD}:/host --privileged ubuntu:16.04  
/bin/sh /host/install-xenial-minbase.sh
```

```
$ docker build -t mypython3.7:prod-xenial -f  
Dockerfile.basesscratch .
```

```
$ docker images mypython3.7
```

```
$ docker build -t factors_flask:cython-custom -f  
Dockerfile.cython-multi .
```

```
$ docker run -it --rm -p 5000:5000 factors_flask:cython-custom
```