1. 安装，Docker权限属于root

# Ubuntu/Linux 64-bit

$ sudo apt-get update

$ sudo apt-get install apt-transport-https ca-certificates curl software-properties-common

添加GPG key和Repository

$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -

$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb\_release -cs) stable"

$ sudo apt-get update

$ sudo apt-get install docker-ce

# Cenos 7 64-bit

$ sudo yum install -y yum-utils device-mapper-persistent-data lvm2

$ sudo yum-config-manager --add-repo <https://download.docker.com/linux/centos/docker-ce.repo>

$ sudo yum-config-manager --enable docker-ce-edge

$ sudo yum-config-manager --enable docker-ce-test

**启动Docker**

# Ubuntu

$ service docker start

# CentOS 7

$ sudo systemctl start docker

测试Docker

$ sudo docker run hello-world

$ sudo docker version

$ sudo docker info

**安装Docker-Compose**

$ sudo curl -L "https://github.com/docker/compose/releases/download/1.23.1/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

$ sudo chmod +x /usr/local/bin/docker-compose

测试安装是否成功

$ docker-compose --version

1. 创建caffe镜像

$ cd /home/fanyuguang/Project/cover-image-deeplearning/

$ vim Dockerfile

填入如下信息:

FROM ubuntu:16.04

MAINTAINER fanyuguang@xiaomi.com

RUN apt update && apt install -y --no-install-recommends build-essential cmake git wget python libgflags-dev libgoogle-glog-dev liblmdb-dev libprotobuf-dev libleveldb-dev libsnappy-dev libopencv-dev libhdf5-serial-dev protobuf-compiler libboost-all-dev libatlas-base-dev python-dev python-pip python-numpy python-scipy

RUN mkdir /usr/local/caffe

ENV CAFFE\_ROOT=/usr/local/caffe

WORKDIR $CAFFE\_ROOT

RUN git clone --depth 1 https://github.com/BVLC/caffe.git .

RUN for req in $(cat requirements.txt); do pip install $req; done

ENV PYCAFFE\_ROOT $CAFFE\_ROOT/python

ENV PYTHONPATH $PYTHONPATH:$PYCAFFE\_ROOT

ENV LD\_LIBRARY\_PATH $LD\_LIBRARY\_PATH:/usr/local/lib

RUN mkdir build && cd build

RUN cmake -DCPU\_ONLY=ON .. && make all && make install && make runtest

ENV PATH $PATH:$CAFFE\_ROOT/build/tools:$PYCAFFE\_ROOT

RUN echo "$CAFFE\_ROOT/build/lib" >> /etc/ld.so.conf.d/caffe.conf && ldconfig

COPY cover-image-caffe /usr/local/

WORKDIR /workspace

build镜像，其中caffe:cpu为镜像的名字

$ sudo docker build -t caffe:cpu .

在镜像仓库根据关键字搜索镜像，其中caffe为关键字

$ sudo docker search caffe

下载镜像

$ sudo docker pull

Linux下普通用户使用Docker

创建docker组，一般安装完docker会自动添加docker用户组

$ sudo groupadd docker

将用户加入到docker用户组，如work为普通用户

$ sudo gpasswd -a work docker

使用如下命令查看work所属用户组，看是否添加成功

重新启动docker服务

# Ubuntu

$ service docker restart

# CentOS 7

$ sudo systemctl restart docker

重新登陆work用户，work用户就可以使用docker了

问题：

1. 执行$ docker run -it -v 挂载目录后，容器内程序调用目录显示权限否定

解决方案：设置-- privileged参数，以root身份执行docker，$ docker run -it -- privileged=true -v