实验课程5-2 使用docker运行一个容器

1、docker客户端的使用方法可以通过help命令来查看:

```
$ docker-h
 Commands:
           Attach local standard input, output, and error streams to a running container Build an image from a Dockerfile Create a new image from a container's changes
 attach
 build
 commit
             Copy files/folders between a container and the local filesystem
 ср
             Create a new container
 create
             Inspect changes to files or directories on a container's filesystem
 diff
           Get real time events from the server
 events
              Run a command in a running container
 exec
            Export a container's filesystem as a tar archive
 export
 history
              Show the history of an image
             List images
 images
              Import the contents from a tarball to create a filesystem image
 import
 info
              Display system-wide information
 inspect
            Return low-level information on Docker objects
 kill
              Kill one or more running containers
              Load an image from a tar archive or STDIN
 load
 login
              Log in to a Docker registry
              Log out from a Docker registry
 logout
 logs
              Fetch the logs of a container
              Pause all processes within one or more containers
 pause
  . . .
```

2、接下来我们尝试使用docker运行一个nginx应用:

(1) 当运行容器时,需要使用本地存储的容器镜像,查找Dockerhub上的nginx镜像

\$ docker search nginx NAME DESCRIPTION OFFICIAL STARS AUTOMATED nginx Official build of Nginx. 9828 [OK] jwilder/nginx-proxy Automated Nginx reverse proxy for docker con... 1427 [οκ] richarvey/nginx-php-fpm Container running Nginx + PHP-FPM capable of... 619 [OK] jrcs/letsencrypt-nginx-proxy-companion LetsEncrypt container to use with nginx as p... 423 [οκ] kong Open-source Microservice & API Management la... 230 [οκ] webdevops/php-nginx Nginx with PHP-FPM 113 [οκ] kitematic/hello-world-nginx A light-weight nginx container that demonstr... 111 zabbix/zabbix-web-nginx-mysql Zabbix frontend based on Nginx webserver wi... 72 [οκ] bitnami/nginx Bitnami nginx Docker Image [OK] 1andlinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5 ubuntu-16-nginx-php-phpmyadmin-45 Γοκ Ί mysq1-5

我们拉取官方提供的nginx镜像:

\$ docker pull nginx:latest
Using default tag: latest

latest: Pulling from library/nginx

802b00ed6f79: Pull complete 5291925314b3: Pull complete bd9f53b2c2de: Pull complete

Digest: sha256:9ad0746d8f2ea6df3a17ba89eca40b48c47066dfab55a75e08e2b70fc80d929e

Status: Downloaded newer image for nginx:latest

(2) 使用nginx镜像运行容器

\$ docker run -itd -p 30080:80 --name mynginx nginx:latest
3b4cb53b72b8482c85d332e936fc01a5f68eef5f137d589e9ebc41ba9d2ff104

(3) 查看当前环境运行的容器

\$ docker ps

CONTAINER ID IMAGE

COMMAND CREATED STATUS PORTS

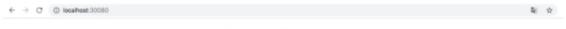
NAMES

3b4cb53b72b8 nginx

"nginx -g 'daemon of..." 3 seconds ago Up 2 seconds 0.0.0.0:30080-

>80/tcp mynginx

(4) 访问nginx服务, http://localhost:30080



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to <u>nginx.org</u>. Commercial support is available at <u>nginx.com</u>.

Thank you for using nginx.