

前言

系统环境：Centos7、jdk1.8

docker私服：可以把项目通过dockerfile文件build成docker镜像，供其他环境拉取。部署在本地，私有化。

安装

dockerHUB私服

1. 搭建registry

```
1 #拉取registry镜像
2 [root@localhost home]# docker pull registry
3 Using default tag: latest
4 latest: Pulling from library/registry
5 c87736221ed0: Pull complete
6 1cc8e0bb44df: Pull complete
7 54d33bcb37f5: Pull complete
8 e8afc091c171: Pull complete
9 b4541f6d3db6: Pull complete
10 Digest: sha256:8004747f1e8cd820a148fb7499d71a76d45ff66bac6a29129bdfbdc0154d146
11 Status: Downloaded newer image for registry:latest
12
13 #查看镜像
14 [root@localhost home]# docker images
15 REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
16 registry             latest          f32a97de94e1    6 months ago   25.8MB
17
18 #启动容器
19 [root@localhost home]# docker run -d -v /data/registry:/var/lib/registry -p 5000:5000 --restart=always --name qdockerhub registry:latest
20 67b0ac40561688b8bb874fa9674e44eb069cc6ee443127ba80b140ea51947af7
21
22 #测试/v2/_catalog接口
23 [root@localhost home]# curl http://127.0.0.1:5000/v2/_catalog
24 {"repositories": []}
25 [root@localhost home]#
```

2. 提交镜像

```
1 #拉取tomcat测试提交
2 [root@localhost home]# docker pull tomcat
3 Using default tag: latest
4 latest: Pulling from library/tomcat
5 092586df9206: Pull complete
6 ef599477fae0: Pull complete
7 4530c6472b5d: Pull complete
8 d34d61487075: Pull complete
9 272f46008219: Pull complete
10 12ff6ccfe7a6: Pull complete
11 f26b99e1adb1: Pull complete
12 21bec9c8ea28: Pull complete
13 e2f6023231f2: Pull complete
14 c47eb491a5e3: Pull complete
15 Digest: sha256:74e52cc6d27dacb079b273c129d6bf32df6ba328d6508b81ef65f41675ae9570
16 Status: Downloaded newer image for tomcat:latest
17
18 #查看镜像
19 [root@localhost home]# docker images
20 REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
21 tomcat              latest          365b0a528e2e    4 days ago     506MB
22 registry            latest          f32a97de94e1    6 months ago   25.8MB
23
24 #给镜像重命名，ip:端口/镜像名称
25 [root@localhost home]# docker tag tomcat:latest 127.0.0.1:5000/testtomcat
26
27 #再次查看镜像
28 [root@localhost home]# docker images
29 REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
30 127.0.0.1:5000/testtomcat latest          365b0a528e2e    4 days ago     506MB
31 tomcat              latest          365b0a528e2e    4 days ago     506MB
32 registry            latest          f32a97de94e1    6 months ago   25.8MB
33
34 #提交镜像到docker私服
35 [root@localhost home]# docker push 127.0.0.1:5000/testtomcat
36 The push refers to repository [127.0.0.1:5000/testtomcat]
37 4a3ccf95eef9: Pushed
38 4437177a7bda: Pushed
39 5161954b2663: Pushed
40 57e6a3d20ce9: Pushed
41 1690af51cb08: Pushed
42 5a30999619d7: Pushed
43 2e669e0134f5: Pushed
44 8bacec4e3446: Pushed
45 26b1991f37bd: Pushed
46 55e6b89812f3: Pushed
47 latest: digest: sha256:416e93b104aa4bceff6005ec6cc4e073196f98d8e3aa4564c3f7d6ad3591d767 size: 2422
48
49 #curl验证
50 [root@localhost home]# curl http://127.0.0.1:5000/v2/_catalog
51 {"repositories":["testtomcat"]}
```

3. 拉取镜像

```
1 #查看镜像
2 [root@localhost home]# docker images
3 REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
4 registry             latest             f32a97de94e1       6 months ago       25.8MB
5
6 #拉取docker私服镜像
7 [root@localhost home]# docker pull 127.0.0.1:5000/testtomcat
8 Using default tag: latest
9 latest: Pulling from testtomcat
10 092586df9206: Pull complete
11 ef599477fae0: Pull complete
12 4530c6472b5d: Pull complete
13 d34d61487075: Pull complete
14 272f46008219: Pull complete
15 12ff6ccfe7a6: Pull complete
16 f26b99eladbl: Pull complete
17 21bec9c8ea28: Pull complete
18 e2f6023231f2: Pull complete
19 c47eb491a5e3: Pull complete
20 Digest: sha256:416e93b104aa4bceff6005ec6cc4e073196f98d8e3aa4564c3f7d6ad3591d767
21 Status: Downloaded newer image for 127.0.0.1:5000/testtomcat:latest
22
23 #再次查看镜像
24 [root@localhost home]# docker images
25 REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
26 127.0.0.1:5000/testtomcat  latest             365b0a528e2e       4 days ago         506MB
27 registry             latest             f32a97de94e1       6 months ago       25.8MB
```

4.删除私服镜像

```
1 # 查看当前docker私服中的镜像
2 [root@localhost ~]# curl http://127.0.0.1:5000/v2/_catalog
3 {"repositories":["mingbytesiteweb"]}
4
5 # 查看docker私服容器，重点是 CONTAINER ID
6 [root@localhost ~]# docker ps
7 CONTAINER ID        IMAGE               COMMAND              CREATED             STATUS              PORTS              NAMES
8 67b0ac405616        registry:latest    "/entrypoint.sh /etc..." 44 hours ago       Up 44 hours        0.0.0.0:5000->5000/tcp  qdockerhub
9
10 # 删除docker私服中的“mingbytesiteweb”镜像
11 # 其中67b0ac405616 为docker私服容器id
12 [root@localhost ~]# docker exec 67b0ac405616 rm -rf /var/lib/registry/docker/registry/v2/repositories/mingbytesiteweb
13
14 # 清除掉blob
15 # 67b0为docker私服容器id
16 [root@localhost ~]# docker exec 67b0 bin/registry garbage-collect /etc/docker/registry/config.yml
17
18 0 blobs marked, 9 blobs and 0 manifests eligible for deletion
19 blob eligible for deletion: sha256:a381f92f36de52ade5b5610ef1b354713f21902b2ef32abf8f5101daf686e6b4
20 blob eligible for deletion: sha256:cce6b5d4a535e729c30f1f9140a61e5fe408250c442ad69569612094970f8035
21 blob eligible for deletion: sha256:d5c237920c394bda8bf1ef31b00bbde458f6978c159303e00d712a95c3f32a40
22 time="2019-09-20T02:53:41.576433178Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/a3/a381f92f36de52ade5b5610ef1b354713f21902b2ef32abf8f5101da
23 time="2019-09-20T02:53:41.576740825Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/cc/cce6b5d4a535e729c30f1f9140a61e5fe408250c442ad69569612094
24 time="2019-09-20T02:53:41.577819834Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/d5/d5c237920c394bda8bf1ef31b00bbde458f6978c159303e00d712a95
25 blob eligible for deletion: sha256:f17d81b4b692f7e0d6c1176c86b81d9f2cb5ac5349703adca51c61debce413c
26 blob eligible for deletion: sha256:01fe0503c7f786c0613596ab151412f7fd68874d80c43289e5c32725ef1c52ff
27 blob eligible for deletion: sha256:082bd21a11cbf8765d11f10147dc59639118b0700c43a6eef427059faa99e939
28 blob eligible for deletion: sha256:396a68a9a5c5ed3ab7b570199a9daee6b468b5cacd4e2a6d0040e3ea7c9bb891
29 blob eligible for deletion: sha256:3ba74338e49429d19a7e6609eee9f16faa369aa30cdcc295b5382999afa3143a
30 blob eligible for deletion: sha256:5ed7726b81ebb228b250e4ef703ec976b56f8db47d5d9f82ce93ebb026fc6e5f
31 time="2019-09-20T02:53:41.58367518Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/f1/f17d81b4b692f7e0d6c1176c86b81d9f2cb5ac5349703adca51c61deb
32 time="2019-09-20T02:53:41.58874132Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/01/01fe0503c7f786c0613596ab151412f7fd68874d80c43289e5c32725e
33 time="2019-09-20T02:53:41.589391384Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/08/082bd21a11cbf8765d11f10147dc59639118b0700c43a6eef427059f
34 time="2019-09-20T02:53:41.589628015Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/39/396a68a9a5c5ed3ab7b570199a9daee6b468b5cacd4e2a6d0040e3ea
35 time="2019-09-20T02:53:41.589939086Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/3b/3ba74338e49429d19a7e6609eee9f16faa369aa30cdcc295b5382999
36 time="2019-09-20T02:53:41.590973494Z" level=info msg="Deleting blob: /docker/registry/v2/blobs/sha256/5e/5ed7726b81ebb228b250e4ef703ec976b56f8db47d5d9f82ce93ebb0
    # 删除完成
37 [root@localhost ~]# curl http://127.0.0.1:5000/v2/_catalog
38 {"repositories":[]}
```

错误集合

a. 运行错误1

错误提示: [root@izj6c0zsm04q86s2tu4el2z /]# docker run -it docker.io/ubuntu:latest /bin/bash
/usr/bin/docker-current: Error response from daemon: oci runtime error: container_linux.go:235: starting container process caused "process_linux.go:258: applying cg

解决办法: yum update

b. 私有仓库push错误(改配置后一定要重启docker)

- docker私有仓库的5000端口是否在防火墙中打开
- daemon.json文件中提交镜像的地址是否修改为私有docker仓库的地址
- 添加镜像仓库地址insecure-registries参数，内容修改如下：

```
vim /etc/docker/daemon.json
{
    "registry-mirrors":["https://registry.docker-cn.com"],
    "insecure-registries":["47.240.32.247:5000"]
}
```

```
[root@localhost bin]# systemctl daemon-reload
[root@localhost bin]# systemctl restart docker
```

