Harbor安装配置

Centos(7.2)

Docker 1.2

Docker-compose 编排工具

## 一.环境安装：

Docker install：

curl -fsSL https://get.docker.io | bash

Docker-compose install（<https://docs.docker.com/compose/install/> ）：

curl -L "https://github.com/docker/compose/releases/download/1.8.1/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

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

参考地址：

<https://vmware.github.io/harbor/>

<https://github.com/vmware/harbor>

<https://github.com/vmware/harbor/blob/master/docs/installation_guide.md>

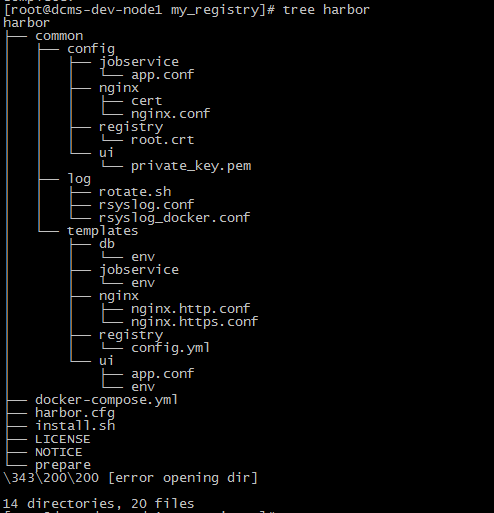
## 二.部署harbor

1. 下载安装包

wget <https://github.com/vmware/harbor/releases/download/0.4.5/harbor-online-installer-0.4.5.tgz>

tar xvf harbor-online-installer-0.4.5.tgz

解压之后目录结构如下：



其中：

Harbor.cfg 全局配置文件，主要包含了一些常用设置，比如是否开启https等。

install.sh　安装脚本

prepare 是一个python写的预处理脚本，主要用于初始化一些harbor.cfg的相关设置。

docker-compose.yaml 描述了组件之间依赖关系以及配置挂载，数据持久化等设置。

1. 配置harbor

Harbor配置参考详解

hostname = reg.mydomain.com #harbor服务器域名

ui\_url\_protocol = http #UI组件访问协议

email\_server = smtp.mydomain.com #email服务器地址

email\_server\_port = 25 #email 端口

email\_username = [sample\_admin@mydomain.com](mailto:sample_admin@mydomain.com) #email 账户

email\_password = abc #email 密码

email\_from = admin <sample\_admin@mydomain.com> #email发件人

email\_ssl = false #是否启用ssl

harbor\_admin\_password = Harbor12345 #harbor初始化管理员(admin)密码

auth\_mode = db\_auth #权限管理模型

ldap\_url = ldaps://ldap.mydomain.com #ldap地址

ldap\_basedn = ou=people,dc=mydomain,dc=com #

ldap\_uid = uid #

ldap\_scope = 3 #

db\_password = root123 #数据库管理员密码

self\_registration = on #是否打开自动注册

use\_compressed\_js = on #是否启用压缩js

max\_job\_workers = 3 #最大任务数

token\_expiration = 30 #token超时

verify\_remote\_cert = on #是否验证远程证书

customize\_crt = on #是否启用自定义证书

3.ssl 证书配置

crt\_country = CN

crt\_state = State

crt\_location = CN

crt\_organization = organization

crt\_organizationalunit = organizational unit

crt\_commonname = example.com

crt\_email = example@example.com

ssl\_cert = /path/to/server.crt

ssl\_cert\_key = /path/to/server.key

1. 关于邮件的配置

qq 邮件需要申请授权码

<http://service.mail.qq.com/cgi-bin/help?subtype=1&&id=28&&no=1001256>

email\_server = smtp.qq.com

email\_server\_port = 465

email\_username = 1218761836@qq.com

email\_password = nyexhxqredreggha

email\_from = 1218761836@qq.com

email\_ssl = true

crt\_email = [1218761836@qq.com](mailto:1218761836@qq.com)

1. docker-compose 文件配置

version: '2'

services:

log:

image: vmware/harbor-log:0.4.5

container\_name: harbor-log

restart: always

volumes:

- /var/log/harbor/:/var/log/docker/

ports:

- 1514:514

registry:

image: library/registry:2.5.0

container\_name: registry

restart: always

volumes:

# - /data/registry:/storage

- ./common/config/registry/:/etc/registry/

environment:

- GODEBUG=netdns=cgo

command:

["serve", "/etc/registry/config.yml"]

1. 配置后端存储oss

<https://docs.docker.com/registry/storage-drivers/>

vim common/templates/registry/config.yml

version: 0.1

log:

level: debug

formatter: text

fields:

service: registry

environment: staging

storage:

oss:

accesskeyid:

accesskeysecret:

region: oss-cn-beijing

endpoint:

bucket:

secure: false

internal: true

delete:

enabled: true

redirect:

disable: false

cache:

blobdescriptor: inmemory

maintenance:

uploadpurging:

enabled: true

age: 168h

interval: 24h

dryrun: false

http:

addr: 0.0.0.0:5000

debug:

addr: 0.0.0.0:5001

notifications:

endpoints:

- name: harbor

disabled: false

url: http://ui/service/notifications

timeout: 3000ms

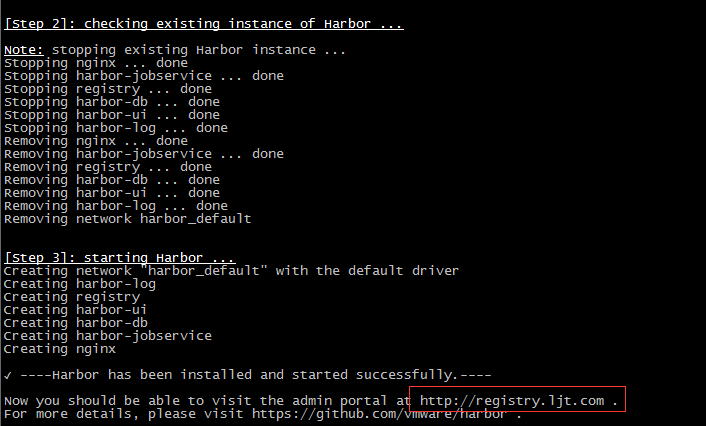
threshold: 5

backoff: 1s

1. http 的配置启动

上面配置完毕的话就是一个http 的配置，配置生成./prepare (每次修改配置文件都需要执行这个)

然后./install.sh 安装



1. 配置HTTPS

参考文档 <https://github.com/vmware/harbor/blob/master/docs/configure_https.md>

编辑配置文件，填写证书文件存放路径

vim harbor.cfg

#It can be set to https if ssl is enabled on nginx.

ui\_url\_protocol = https

#The path of cert and key files for nginx, they are applied only the protocol is set to https

ssl\_cert = /data/harbor/auth/registry.ljt.com.crt

ssl\_cert\_key = /data/harbor/auth/registry.ljt.com.key

8.1 创建证书

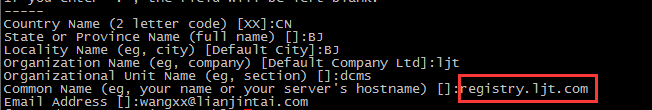
mkdir /data/harbor/auth/

cd /data/harbor/auth/

openssl req -newkey rsa:4096 -nodes -sha256 -keyout ca.key -x509 -days 365 -out ca.crt

这里需要注意的是：

这个comm name 要和harbor.cfg 中的hostname 一致。



8.2

openssl req -newkey rsa:4096 -nodes -sha256 -keyout registry.ljt.com.key -out registry.ljt.com.csr

#### 8.3

openssl x509 -req -days 365 -in registry.ljt.com.csr -CA ca.crt -CAkey ca.key -CAcreateserial -out registry.ljt.com.crt、

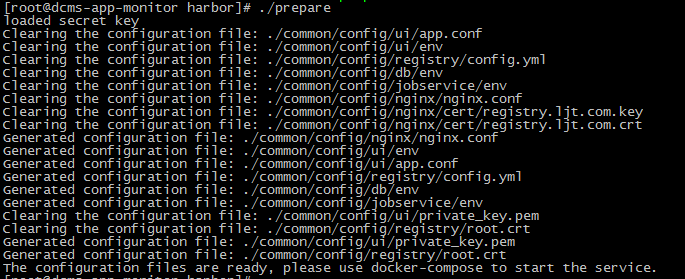
8.4添加到系统

mkdir /etc/docker/certs.d/registry.ljt.com

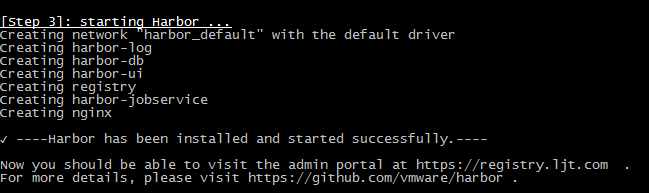
cp ca.crt /etc/docker/certs.d/registry.ljt.com

1. 启动

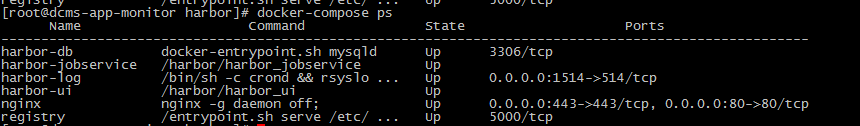
./prepare 更新配置，查看证书配置文件是否一致



./install.sh 启动



docker-compose ps 查看服务状态



1. 测试

docker login -uljt -pLjt12345 registry.ljt.com

docker push registry.ljt.com/dcms\_ljt/dcms-openapi:test

其中 dcms\_ljt 是我创建的项目

在web界面显示如下

三、删除镜像

在harbor 的安装目录下执行

关闭harbor

docker-compose stop

docker run -it --name gc --rm --volumes-from registry registry:2.5.0 garbage-collect --dry-run /etc/registry/config.yml

执行垃圾回收

docker run -it --name gc --rm --volumes-from registry registry:2.5.0 garbage-collect /etc/registry/config.yml

启动harbor

docker-compose start