Ubuntu20.04 Install Harbor

Harbor 简单部署（For Ubuntu\_20.04）

官方最小配置（因为是存储镜像的所以推荐硬盘大点）

2个cpu

4g内存

40g硬盘

安装前配置

在真正安装之前，我们还要安装下面这几个组件：

docker

docker-compose

python

openssl

安装docker

更新apt源,并添加https支持

$ sudo apt-get update && sudo apt-get install apt-transport-https ca-certificates curl gnupg lsb-release

使用utc源添加GPG Key

$ curl -fsSL https://mirrors.ustc.edu.cn/docker-ce/linux/ubuntu/gpg | sudo apt-key add

添加Docker-ce稳定版源地址

$ sudo add-apt-repository "deb [arch=amd64] https://mirrors.ustc.edu.cn/docker-ce/linux/ubuntu $(lsb\_release -cs) stable"

安装 [docker-ce](https://docs.docker.com/engine/install/ubuntu/)

目前最新版本是 20.10.5 (2021-03-02)

要安裝特定版本的Docker Engine，請在存儲庫中列出可用版本，然後選擇並安裝：

*a. 列出您的倉庫中可用的版本：*

$ apt-cache madison docker-ce

docker-ce | 5:20.10.5~3-0~ubuntu-focal | https://download.docker.com/linux/ubuntu focal/stable amd64 Packages

docker-ce | 5:20.10.5~3-0~ubuntu-focal | https://mirrors.ustc.edu.cn/docker-ce/linux/ubuntu focal/stable amd64 Packages

docker-ce | 5:20.10.4~3-0~ubuntu-focal | https://download.docker.com/linux/ubuntu focal/stable amd64 Packages

docker-ce | 5:20.10.4~3-0~ubuntu-focal | https://mirrors.ustc.edu.cn/docker-ce/linux/ubuntu focal/stable amd64 Packages

*b. 使用第二列中的版本字符串安裝特定版本，例如 5:20.10.5~3-0~ubuntu-focal*

$ sudo apt-get update

$ sudo apt install -y docker-ce=5:20.10.5~3-0~ubuntu-focal

...

Configuration file '/etc/forticlient/config.db'

==> File on system created by you or by a script.

==> File also in package provided by package maintainer.

What would you like to do about it ? Your options are:

Y or I : install the package maintainer's version

N or O : keep your currently-installed version

D : show the differences between the versions

Z : start a shell to examine the situation

The default action is to keep your current version.

\*\*\* config.db (Y/I/N/O/D/Z) [default=N] ? \_**y**\_

...

安装 [docker-compose](https://docs.docker.com/compose/install/)

运行此命令下载docker compose的当前稳定版本：

$ sudo curl -L \

"https://github.com/docker/compose/releases/download/1.28.5/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

% Total % Received % Xferd Average Speed Time Time Time Current

Dload Upload Total Spent Left Speed

100 633 0 633 0 0 1889 0 --:--:-- --:--:-- --:--:-- 1883

100 11.6M 100 11.6M 0 0 3483k 0 0:00:03 0:00:03 --:--:-- 4788k

$ docker-compose --version

docker-compose version 1.28.5, build c4eb3a1f

对二进制文件应用可执行权限

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

$ dpkg -l |grep openssl

ii libxmlsec1-openssl:amd64 1.2.28-2 amd64 Openssl engine for the XML security library

ii openssl 1.1.1f-1ubuntu2.2 amd64 Secure Sockets Layer toolkit - cryptographic utility

ii perl-openssl-defaults:amd64 4 amd64 version compatibility baseline for Perl OpenSSL packages

ii python3-openssl 19.0.0-1build1 all Python 3 wrapper around the OpenSSL library

下载 [Harbor](https://github.com/vmware/harbor/releases)

安装有两种方式，一种是off-line ，一种是on-line，即离线和在线安装， 离线安装需要下载的安装包较大，在线安装下载的安装包很小，课题根据自己的情况选择，此选择的是 1.8.1 版本

下载在线安装包

$ wget https://storage.googleapis.com/harbor-releases/release-1.8.0/harbor-online-installer-v1.8.1.tgz

--2021-03-16 16:14:09-- https://storage.googleapis.com/harbor-releases/release-1.8.0/harbor-online-installer-v1.8.1.tgz

Resolving storage.googleapis.com (storage.googleapis.com)... 172.217.160.112, 172.217.160.80, 2404:6800:4008:801::2010, ...

Connecting to storage.googleapis.com (storage.googleapis.com)|172.217.160.112|:443... connected.

HTTP request sent, awaiting response... 200 OK

Length: 7953 (7.8K) [application/x-tar]

Saving to: ‘harbor-online-installer-v1.8.1.tgz’

harbor-online-installer-v1.8.1.t 100%[=========================================================>] 7.77K --.-KB/s in 0s

2021-03-16 16:14:09 (133 MB/s) - ‘harbor-online-installer-v1.8.1.tgz’ saved [7953/7953]

安装 Harbor 解压安装包

$ sudo tar zxvf harbor-online-installer-v1.8.1.tgz -C /usr/src/

harbor/prepare

harbor/LICENSE

harbor/install.sh

harbor/harbor.yml

编辑配置文件

$ sudo vim harbor.yml

修改hostname为本机ip地址

hostname: 192.168.1.195

$ sudo su

root@ub20042s:/usr/src/harbor#

# cat harbor.yml |grep -v "^#"|grep -v " #"|grep -v "^$"

hostname: 192.168.1.195

http:

port: 80

harbor\_admin\_password: Harbor12345

database:

password: root123

data\_volume: /data

clair:

updaters\_interval: 12

http\_proxy:

https\_proxy:

no\_proxy: 127.0.0.1,localhost,core,registry

jobservice:

max\_job\_workers: 10

chart:

absolute\_url: disabled

log:

level: info

rotate\_count: 50

rotate\_size: 200M

location: /var/log/harbor

\_version: 1.8.0

# ./install.sh

[Step 0]: checking installation environment ...

Note: docker version: 20.10.5

Note: docker-compose version: 1.28.5

[Step 1]: preparing environment ...

prepare base dir is set to /usr/src/harbor

Unable to find image 'goharbor/prepare:v1.8.1' locally

v1.8.1: Pulling from goharbor/prepare

..

Creating harbor-log ... done

Creating registry ... done

Creating redis ... done

Creating registryctl ... done

Creating harbor-db ... done

Creating harbor-core ... done

Creating harbor-jobservice ... done

Creating harbor-portal ... done

Creating nginx ... done

✔ ----Harbor has been installed and started successfully.----

Now you should be able to visit the admin portal at [http://192.168.1.195](http://192.168.1.195/).

For more details, please visit <https://github.com/goharbor/harbor> .

***之后如果想修改某一个配置比如要把域名修改一下，***

***可以先修改上面 harbor.cfg 这个文件，之后重新执行 install.sh 这个文件就可以了。***

访问页面

開啟瀏覽器，輸入：[http://192.168.1.195](http://192.168.1.195/)

使用默认的账号:admin

密码:Harbor12345

A Not secure 192.168.1.195/harbor'sign-in?redirect 
Harbor 
Harbor 
Username 
pa s sword 
Remember me 
Forgot password 
Sign up for an account 
More into... 

登录验证

登录成功之后，效果如下：

Harbor 
Projects 
Logs 
20 Administration 
users 
Registries 
& Replications 
@ Configuration 
Tasks 
Garbage Collection 
Projects 
+ NEW PROJECT 
Name 
library 
s Level 
Public 
PROJECTS 
REPOSITORIES 
Repos ones Count 
Project Admin 
Opus 
@English 
All Projects 
Creation 
3/16/21.4:30 PM 
g admin v 

测试推送镜像

登录到另外一台服务器，确保docker已经安装好了。

本地配置仓库地址

由于默认的harbor，已经创建了一个公开项目 libary。

$ vim /etc/docker/daemon.json

内容如下：

{"insecure-registries": ["192.168.1.195"]}

接着重启服务

$ systemctl restart docker

基本步驟

在 root 環境下執行：

# 登入：

# docker login 192.168.1.195

## docker login [ip\_address]

# 查看光碟片：

# docker images

# 推送光碟片：

# docker pull alpine

## docker pull [images]

# 在项目中标记镜像：

# docker tag alpine 192.168.1.195/library/alpine

## docker tag [images] [ip\_address]/[projet\_name]/[images]

# 推送镜像到当前项目：

# docker push 192.168.1.195/library/alpine

## docker push [ip\_address]/[projet\_name]/[images]

建立 Dockeerfile:

# 建立專案資料夾

# sudo mkdir nginx\_docker

# 進入到專案資料夾

# cd nginx\_docker

# 建立文件 Dockerfile

# sudo nano Dockerfile

FROM centos:7

RUN yum -y install epel-release

RUN yum -y update

RUN yum -y install nginx

ADD index.html /usr/share/nginx/html/index.html

EXPOSE 80/tcp

CMD ["nginx", "-g daemon off;"]

# 建立文件 index.html

# nano index.html

<header>

<h1>Docker ADD is neat</h1>

</header>

# 製作光碟片

# docker build -t dopensource/nginx .

# 檢查光碟片

# docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

dopensource/nginx latest e56cefff8926 About an hour ago 765MB

nginx latest 6084105296a9 4 days ago 133MB

192.168.1.195/library/alpine latest 28f6e2705743 3 weeks ago 5.61MB

alpine latest 28f6e2705743 3 weeks ago 5.61MB

192.168.1.195/centos/centos latest 300e315adb2f 3 months ago 209MB

參考網址：

* [https://codertw.com/伺服器/376868/](https://codertw.com/%E4%BC%BA%E6%9C%8D%E5%99%A8/376868/)
* <http://www.dark-hamster.com/server/how-to-build-centos-docker-image-and-install-nginx-using-dockerfile/>
* <https://dopensource.com/2016/05/01/creating-a-docker-file/>
* <https://docs.microsoft.com/zh-tw/dotnet/core/install/linux-centos>
* <https://docs.microsoft.com/en-us/dotnet/core/install/linux-centos>
* <https://dotnet.microsoft.com/download/dotnet/>