

# 私有ipfs cluster搭建

## 安装docker和docker-compose

- 注意，由于近期 docker 被墙，可能需要魔法

```
# Add Docker's official GPG key:
sudo apt-get update
sudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o
/etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc

# Add the repository to Apt sources:
echo \
  "deb [arch=$(dpkg --print-architecture) signed-
by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu \
  $(. /etc/os-release && echo "$VERSION_CODENAME") stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin
docker-compose-plugin docker-compose
sudo docker run hello-world
```

## 下载ipfs-cluster-ctl

```
wget https://dist.ipfs.tech/ipfs-cluster-ctl/v1.1.1/ipfs-cluster-
ctl_v1.1.1_linux-amd64.tar.gz
tar xvzf ipfs-cluster-ctl_v1.1.1_linux-amd64.tar.gz
cd ipfs-cluster-ctl
wget https://raw.githubusercontent.com/ipfs/ipfs-cluster/v1.1.1/docker-
compose.yml
# 修改docker-compose.yml，取消节点0的port的注释
# 具体内容见项目config/docker-compose.yml
nano docker-compose.yml
# 启动
sudo docker-compose up
# 现在有3个节点，分别是0，1，2，ipfs端口分别是5000，5001，5002
```

## 暴露端口

```
# 本机端口转发
su root
echo 1 > /proc/sys/net/ipv4/ip_forward
iptables -t nat -A PREROUTING -p tcp --dport 5000 -j REDIRECT --to-ports 5000
iptables -t nat -A PREROUTING -p tcp --dport 5001 -j REDIRECT --to-ports 5001
iptables -t nat -A PREROUTING -p tcp --dport 5002 -j REDIRECT --to-ports 5002
```

# 设置systemctl自启动

```
sudo nano /lib/systemd/system/ipfs.service

[Unit]
Description=ipfs service
Requires=docker.service
After=network.target syslog.target docker.service
Wants=network.target

[Service]
Type=simple
ExecStartPre=/bin/sleep 1
WorkingDirectory=/home/min/ipfs-cluster-ctl/
ExecStart=/usr/bin/docker-compose up -d
ExecStop=/usr/bin/docker-compose down
TimeoutStartSec=10
Restart=always

[Install]
WantedBy=multi-user.target

# 打开自启动
sudo systemctl enable ipfs
# 启动ipfs
sudo systemctl start ipfs
# 查看log
sudo systemctl status ipfs
```