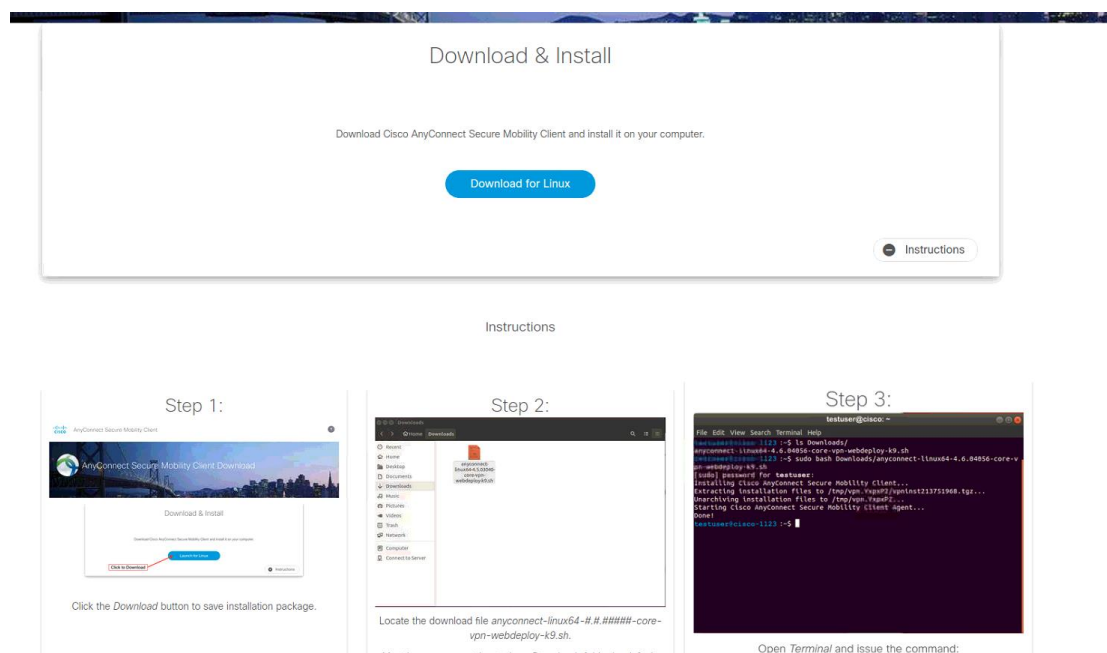


1. 首先下载 cisco(vpn)只有这个是澳大利亚的, FortiClient 香港的

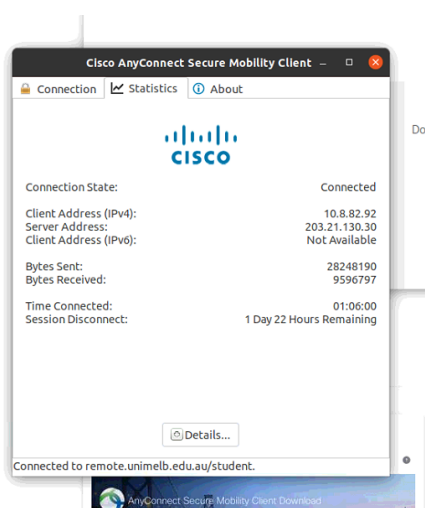
https://remote.unimelb.edu.au/+CSCOE+/logon.html#form_title_text



按照上面的步骤下载下来, 如果你的电脑就是纯英文的 Ubuntu 系统就可以

按照上面的指令, 如果不是就要调一下格式什么 (在网上搜一下出来了)

连接上 cisco 是这个样子

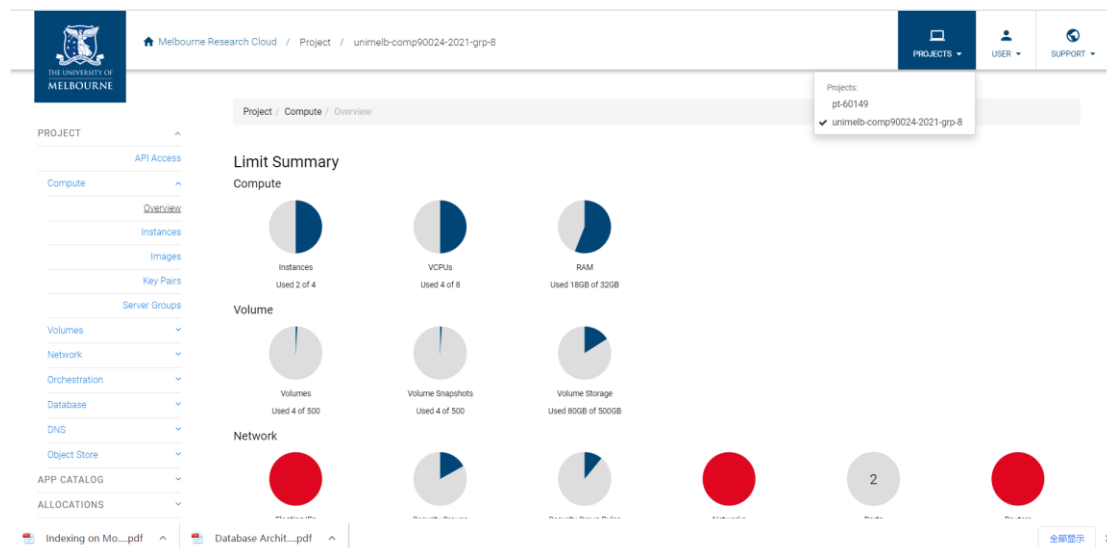


之后进入 openstack dashboard 生成你要使用的密码, 这个密码只出现一次,

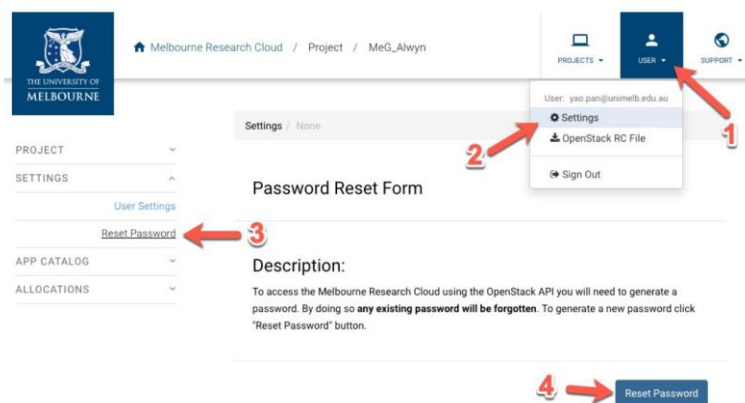
一定要保存好。

<https://dashboard.cloud.unimelb.edu.au/auth/login/?next=/project/>

每个人好像有两个项目，要选择我们一起的那个项目(第二个项目)



之后选择密码的生成(这个和密钥不一样)



比如说我的：

Settings / None

Password Reset Form

Your new password is:

Y2ZjZjYyYjVkJmWE2Mml2

Description:
To access the Melbourne Research Cloud using the OpenStack API you will need to generate a password. By doing so **any existing password will be forgotten**. To generate a new password click "Reset Password" button.

然后配置 key pair

在 Ubuntu 上面输入命令：

Ssh-keygen

输入名字随便取名字可以是 key (id_rsa)

cd /home/ada/.ssh

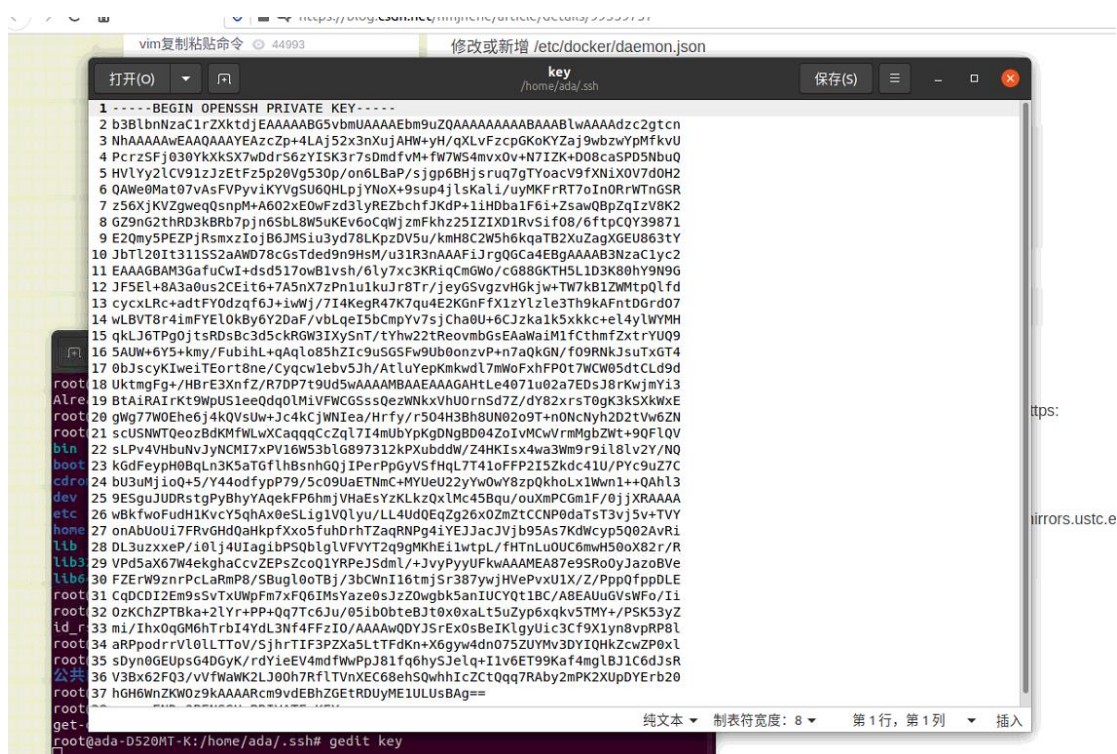
ls

```
root@ada-D520MT-K:/home/ada# cd .ssh
root@ada-D520MT-K:/home/ada/.ssh# ls
get-docker.sh  key  key.pub
root@ada-D520MT-K:/home/ada/.ssh#
```

```
root@ada-D520MT-K:/home/ada# cd .ssh
root@ada-D520MT-K:/home/ada/.ssh# ls
get-docker.sh  key  key.pub
root@ada-D520MT-K:/home/ada/.ssh#
```

这两个 key 是一对，其中 key 是私钥是你自己的，key.pub 是公钥是你 import 到 openstack 里面去的。

这个是 key 私钥



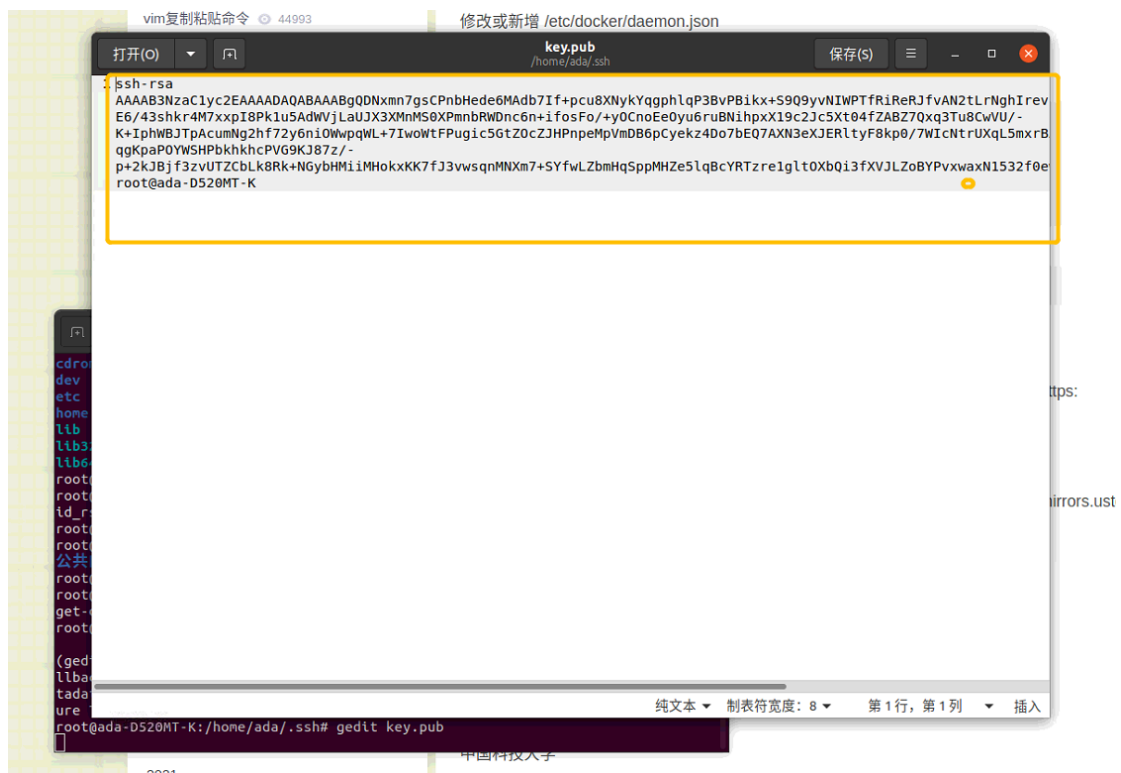
这个是公钥



```
vim复制粘贴命令 44993 修改或新增 /etc/docker/daemon.json

key.pub
/home/ada/.ssh

1 ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQGDQNm7gsCPnbHede6MAdB7If+pcu8XNykyqgphlqP3BvPBikx+S9Q9yvNIWPTfRiReRJfVAN2tLrNghIrev
E6/43shkr4M7xxpI8Pk1u5AdWVjLaUJX3XMnMS0XPmnbRWDnc6n+ifosFo/+y0CnoEe0yu6ruBNihpxX19c2Jc5Xt04fZABZ7Qxq3Tu8CwVU/-
K+IphWBJTpAcumNg2hf72y6niOWwpqWL+7IwoWtFPugic5GtZ0cZJHPnpeMpVmDB6pCyekz4Do7bEQ7AXN3eXJERltyF8kp0/7WIcNtrUXqL5mxrB
qgKpaPOYWSHPbkhhkcPVG9KJ87z/-
p+2kJBjf3zvUTZCbLk8Rk+NGybHMiMHokxKK7fJ3vwsqnMNXm7+SYfwLZbmHqSppMHZe5lqBcYRTzre1glT0XbQ13fXVJLZoBYPvxwaxN1532f0e
root@ada-D520MT-K
```



```
vim复制粘贴命令 44993 修改或新增 /etc/docker/daemon.json

key.pub
/home/ada/.ssh

1 ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQGDQNm7gsCPnbHede6MAdB7If+pcu8XNykyqgphlqP3BvPBikx+S9Q9yvNIWPTfRiReRJfVAN2tLrNghIrev
E6/43shkr4M7xxpI8Pk1u5AdWVjLaUJX3XMnMS0XPmnbRWDnc6n+ifosFo/+y0CnoEe0yu6ruBNihpxX19c2Jc5Xt04fZABZ7Qxq3Tu8CwVU/-
K+IphWBJTpAcumNg2hf72y6niOWwpqWL+7IwoWtFPugic5GtZ0cZJHPnpeMpVmDB6pCyekz4Do7bEQ7AXN3eXJERltyF8kp0/7WIcNtrUXqL5mxrB
qgKpaPOYWSHPbkhhkcPVG9KJ87z/-
p+2kJBjf3zvUTZCbLk8Rk+NGybHMiMHokxKK7fJ3vwsqnMNXm7+SYfwLZbmHqSppMHZe5lqBcYRTzre1glT0XbQ13fXVJLZoBYPvxwaxN1532f0e
root@ada-D520MT-K
```

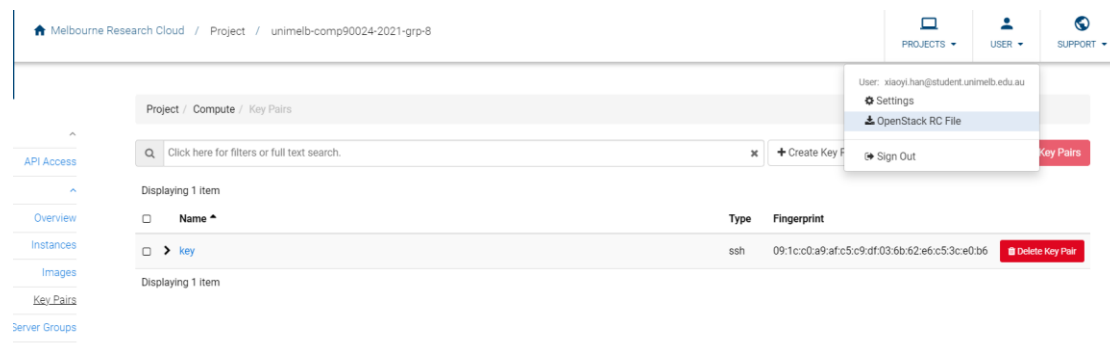
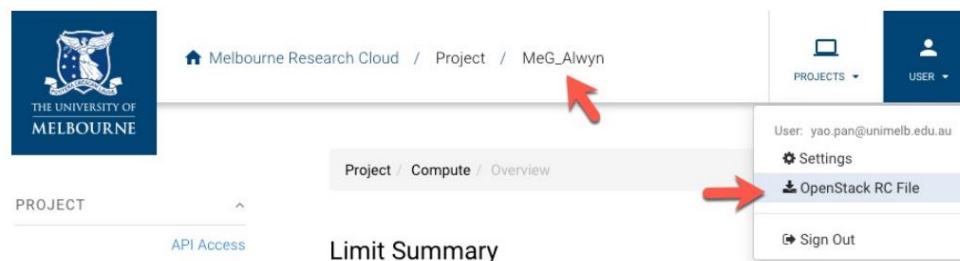
我们要把这一段框出来的文字(key.pub) import (copy) 到 openstack 上。点这个 Import Public Key

这一步是你自己连 openstack 云的时候能连上。

之后，把你的 openrc.sh 导入你的项目里面。按着老师的来做，但是项目名称看第二幅图。

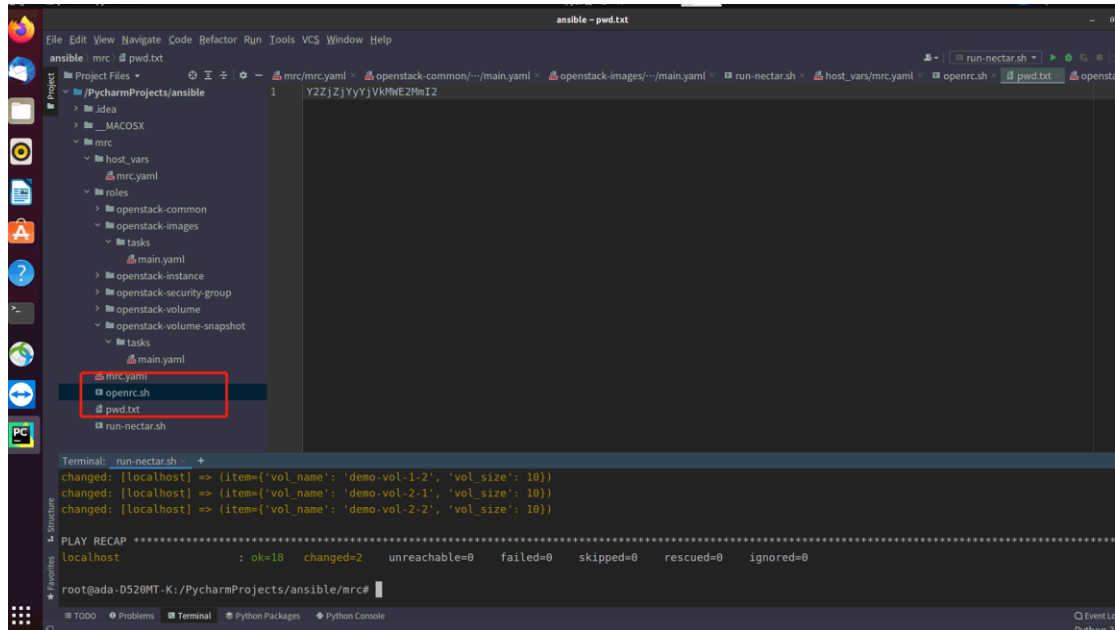
- Prerequisites:

1. Login to <https://dashboard.cloud.unimelb.edu.au>
2. Download [openrc.sh](#) from Dashboard
 - Make sure the correct project is selected
 - Download the OpenStack RC File



下载好后把名字改成 openrc.sh，然后倒入我们项目文件夹根目录下面。





在 ubuntu 下下载 ansible 自动化的维护工具。(老师的 ppt 里面有，也可以在网
上找)

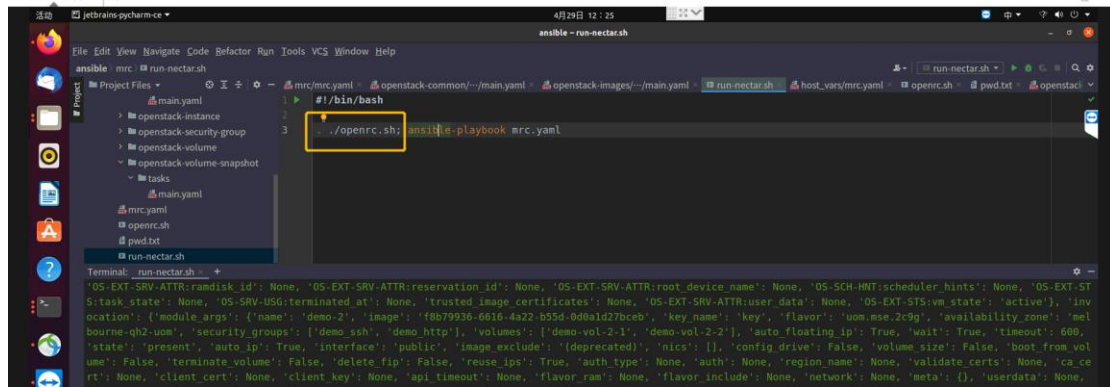
```
$ sudo apt-get update && sudo apt-get install software-properties-common
$ sudo apt-add-repository --yes --update ppa:ansible/ansible
$ sudo apt-get install ansible
```

弄好之后，可以选择老师给我们的第一个程序 demo1。

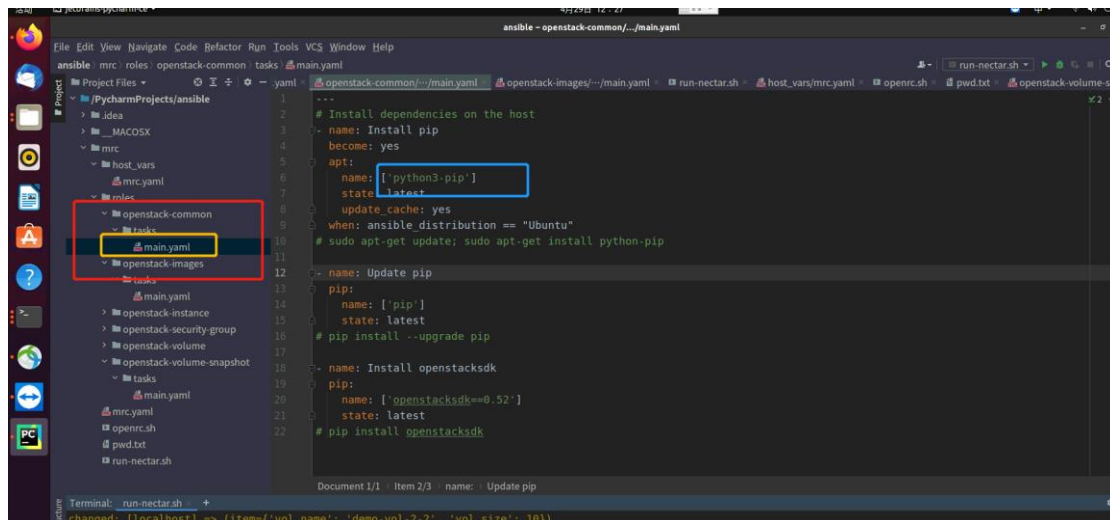
Ansible Demo 1:

- Connect to Melbourne Research Cloud
- List all images
- Create volumes
- Create security groups with security rules
- Launch an instance and attach the volume and security groups
- Create snapshots of the volumes

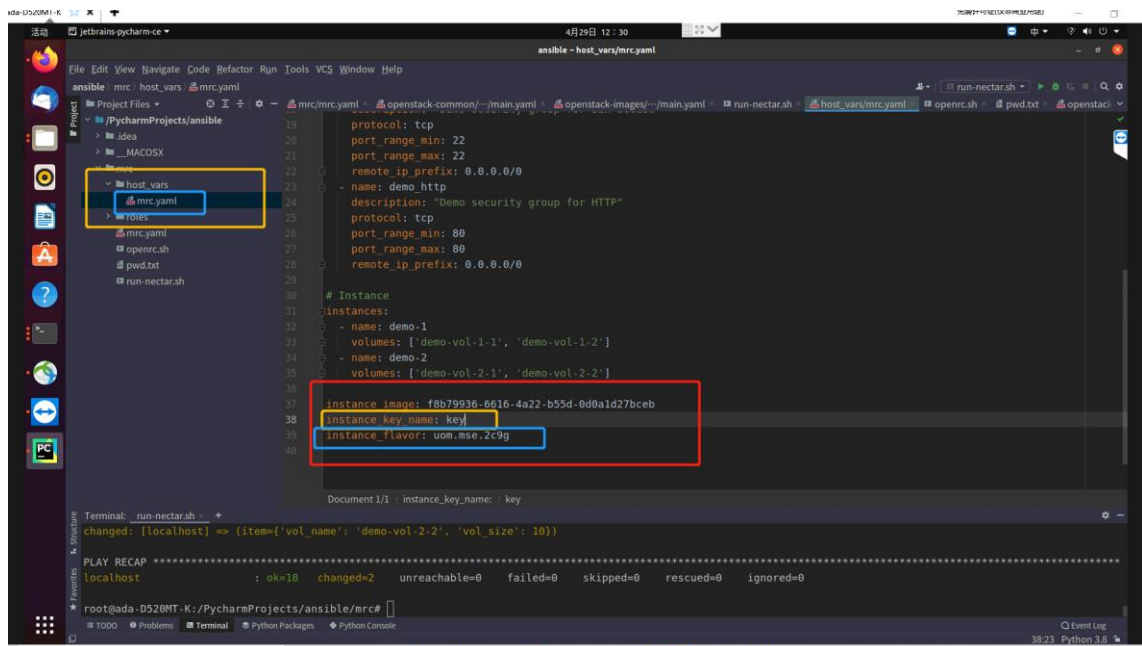
首先改：openrc.sh，把这个改成我们刚才命名的名字。



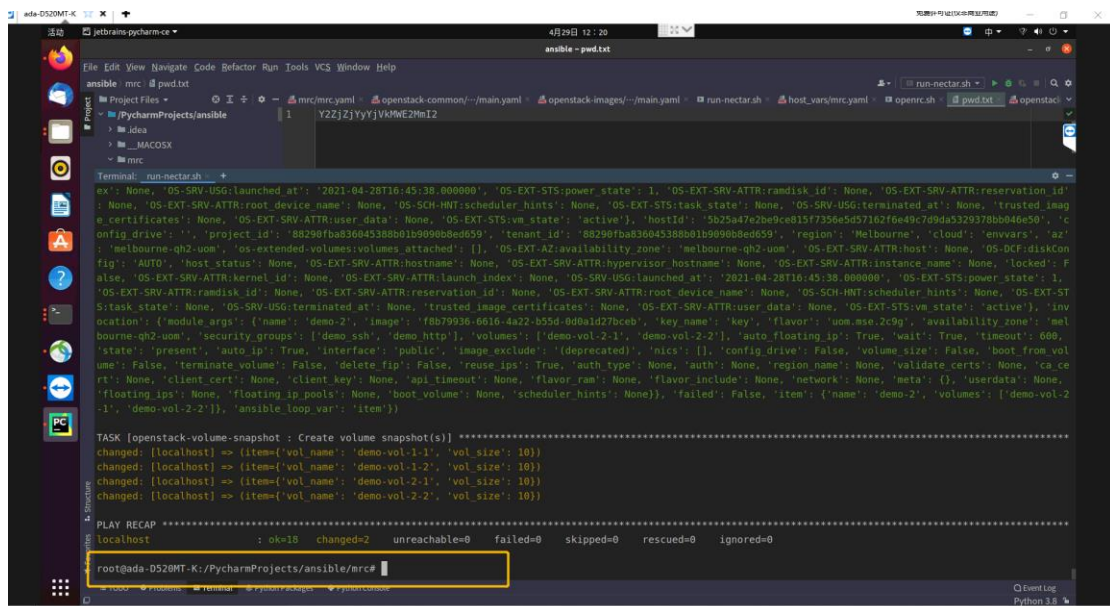
再改：把 openstack-common 下 main.yaml 的 apt: name:改成['python3-pip']



接着改：host_vars 下的 mrc.yaml,倒数第二个就是你的 key pair 名字。最后一个就是你想生成多少 (改成 uom.mse.XcXg) (内存，我理解的) 实例给的我们是两个 demo 每个 demo 9 G (你也可以自己选 4G,9G, 64G(这个用不了)),一共 30G, 我们可以增加成 3 个 demo(9G)



然后就在控制台输入 `sudo ./run-nectar.sh`



然后第一个出来的就是输入密码，你要把你的密码输进去：

Settings / Profile

Password Reset Form

Your new password is:

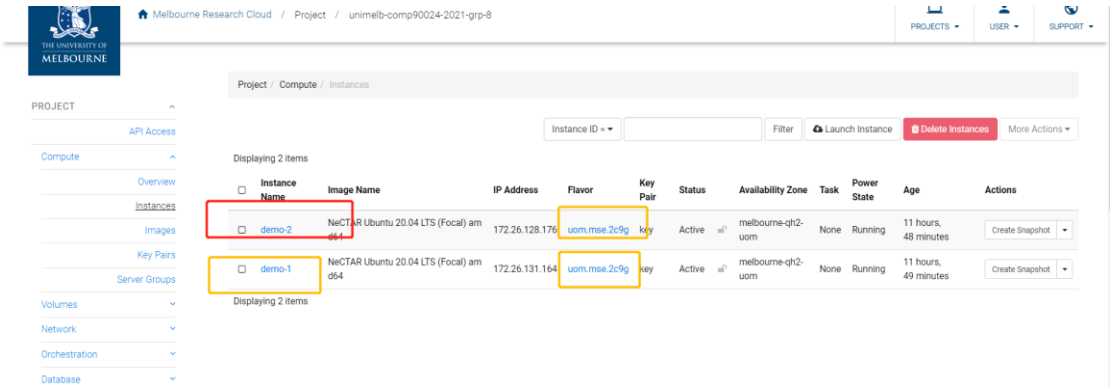
Y2ZjZjYyYjVkJmWE2Mml2

Description:

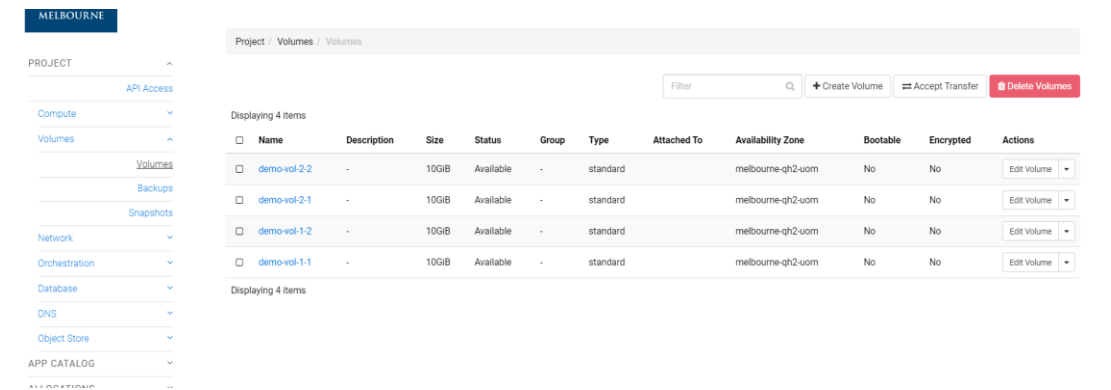
To access the Melbourne Research Cloud using the OpenStack API you will need to generate a password. By doing so **any existing password will be forgotten**. To generate a new password click "Reset Password" button.

如果是全绿色或者黄色就说明是正确的。红色就说明失败。就像我上面的那幅图一样。

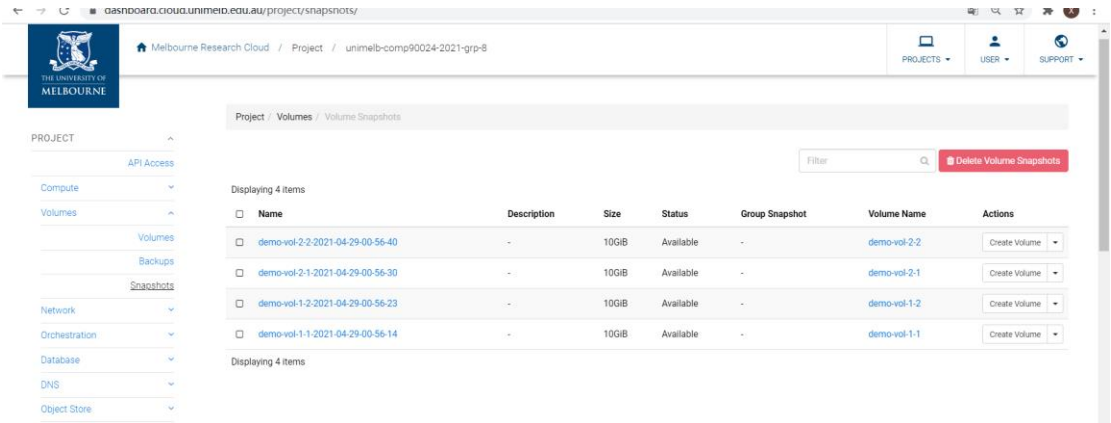
然后到 dashboard 去看。在实例里面有两个云就是我们刚才用代码创建的。那个 IP Address 就是我们在自己电脑上连接云的地址。



容量也是生成成功了（这个就相当于硬盘？每个 demo 下有两个，每个有 10G）



然后看我们创建的 snapshot, 这些 snapshot 都是成功了, 它们的状态是 available。



之后是连接我们刚才创建的云，在云当中创建 docker。命令：

Sudo -l (之前你的私钥和公钥的名字) ubuntu@ IP Address.

这里如果报错的话，你就进你的/ home/ada/.Ssh，把你的私钥设为 chmod 600 XX (私钥)

The screenshot shows the Melbourne Research Cloud console. A table lists two instances: 'demo-2' and 'demo-1'. The 'demo-2' instance is highlighted with a red box, and its IP address '172.26.128.176' is highlighted with a red box. A red arrow points from the IP address to the terminal window below. The terminal window shows the command 'sudo ssh -i key ubuntu@172.26.128.176' being executed. The output shows the user is logged in as 'ubuntu' on the 'demo-2' instance. The terminal also displays the Ubuntu version '20.04.2 LTS (Focal Fossa)' and provides links for documentation, management, and support. A sidebar on the right contains a 'SUPPORTS HERE' button and a '私信' (Private Message) button.

Instance Name	Image Name	IP Address	Key Pair	Status	Availability Zone	Task	Power State	Age	Actions
demo-2	Nectar Ubuntu 20.04 LTS (Focal) am	172.26.128.176	com.mee.2019g	Active	melbourne-g2-uom	None	Running	11 hours, 48 minutes	Create Snapshot
demo-1	Nectar Ubuntu 20.04 LTS (Focal) am	172.26.131.164	com.mee.2019g	Active	melbourne-g2-uom	None	Running	11 hours, 49 minutes	Create Snapshot

```
root@ada-D520MT-K:/home/ada/.ssh# sudo ssh -i key ubuntu@172.26.128.176
Nectar Ubuntu 20.04.2 LTS (Focal Fossa)

Image details and information is available at:
https://support.ehelp.edu.au/support/solutions/articles/6000106269

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your
Internet connection or proxy settings

Last login: Thu Apr 29 04:43:17 2021 from 10.8.82.92
ubuntu@demo-2:~$
```

这样就表示进入了云，只有在换源，也可以选择不换

```
deb http://au.archive.ubuntu.com/ubuntu/ focal main restricted
universe multiverse
deb http://au.archive.ubuntu.com/ubuntu/ focal-security main
restricted universe multiverse
deb http://au.archive.ubuntu.com/ubuntu/ focal-updates main
restricted universe multiverse
deb http://au.archive.ubuntu.com/ubuntu/ focal-backports main
restricted universe multiverse
##测试版源
deb http://au.archive.ubuntu.com/ubuntu/ focal-proposed main
restricted universe multiverse
# 源碼
deb-src http://au.archive.ubuntu.com/ubuntu/ focal main restricted
universe multiverse
```

```
deb-src http://au.archive.ubuntu.com/ubuntu/ focal-security main
restricted universe multiverse
deb-src http://au.archive.ubuntu.com/ubuntu/ focal-updates main
restricted universe multiverse
deb-src http://au.archive.ubuntu.com/ubuntu/ focal-backports main
restricted universe multiverse
##測試版源
deb-src http://au.archive.ubuntu.com/ubuntu/ focal-proposed main
restricted universe multiverse
```