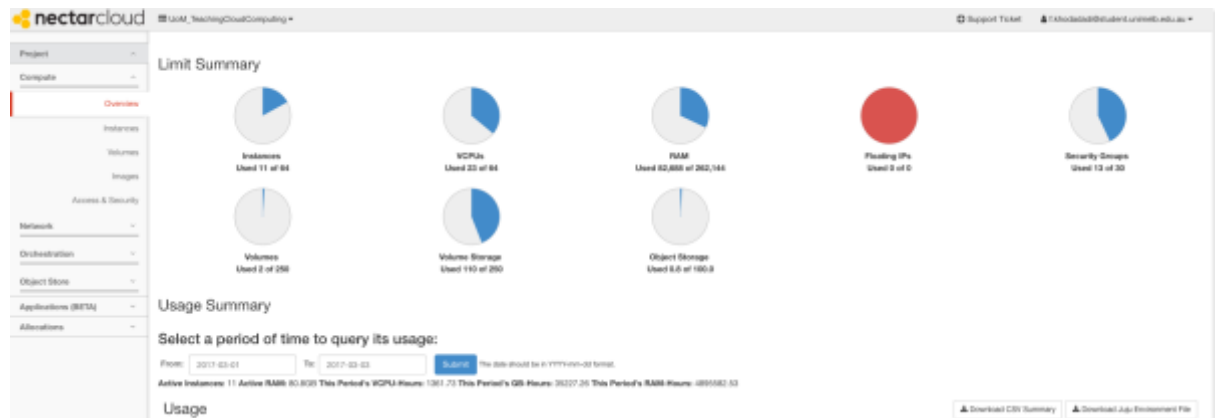
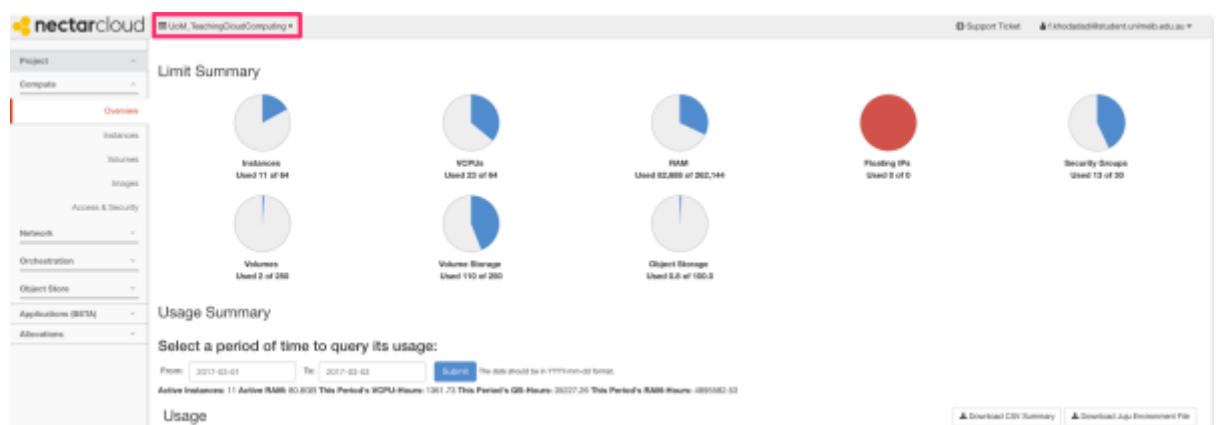


# Creating Virtual Machines Using NeCTAR Dashboard

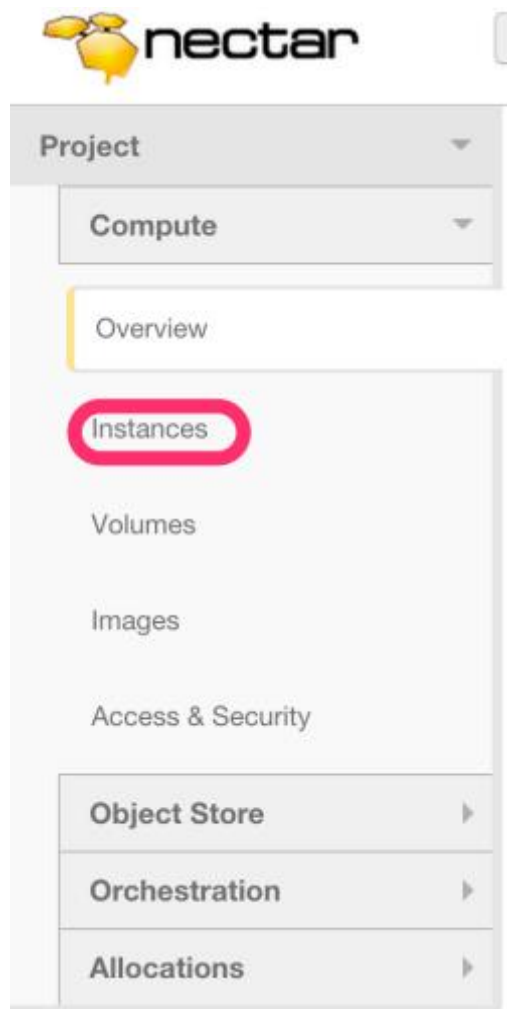
- 1- Login to the NeCTAR dashboard (refer to the tutorial demonstrating NeCTAR login procedure)



- 2- Select your desired project (note that virtual machines created in a project can not be shared and seen in another project)



- 3- Select the “instances” tab from the left menu



- 4- Here you can see a list of created instances. To create a new instance, click the “Launch Instance” button.

Instances

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Size	Key Pair	Status	Availability Zone	Task	Power State	Uptime	Actions
<input type="checkbox"/>	Survey	NeCTAR Ubuntu 14.04 (Trusty) (Old) amd64	115.146.86.1	m1.small   4GB RAM   1 VCPU   10.0GB Disk	aur-key	Active	melbourne-qh2	None	Running	7 months, 2 weeks	<input type="button" value="Create Snapshot"/> <input type="button" value="More ~"/>

Displaying 1 item

- 5- When the dialog box for launching a new instance successfully popped up, enter the required information or select from the drop-down menus as described below:
1. Enter your preferred name for the new instance
  2. Select flavor type according to your needs and available quota. Larger flavors have more RAM and CPU cores. You can see the specification of each flavour type in the “Flavor Details” box.
  3. Specify how many instances of this type you want to create.

4. Choose whether you want to create the instance from an image file or a previously taken snapshot.
5. If you opted for creating a new instance from an image file, choose your desired image file from the list. The list includes pre-loaded image files as well as public image files created and shared by other users. If you are creating a new instance from a snapshot then you should select the name of your desired snapshot from the list.

## Launch Instance ×

Details \*
Access & Security
Networking \*
Availability Zone
Post-Creation
Advanced Options

Instance Name \*
1

Flavor \* ?

m2.tiny

2

Instance Count \* ?
3

Instance Boot Source \* ?

Boot from image

4

Image Name \*

Select Image

5

Specify the details for launching an instance.

The chart below shows the resources used by this project in relation to the project's quotas.

### Flavor Details

Name	m2.tiny
VCPUs	1
Root Disk	5 GB
Ephemeral Disk	0 GB
Total Disk	5 GB
RAM	768 MB

### Project Limits

Number of Instances
11 of 64 Used

Number of VCPUs
23 of 64 Used

Total RAM
82,688 of 262,144 MB Used

Cancel
Launch

- 6- Now select the “Access & Security” tab. Here you see a list of default security groups as well as security groups you have created before. To further be able to login to your instance, you need to open the SSH port on the instance and create/select a key pair. For this purpose, make sure “default” and “ssh” security groups are checked and then select your key pair from the drop-down list if you have created your preferred key before. Otherwise, click the + button to create/import a new key pair as discussed below.

**Launch Instance** [X]

Details \* | Access & Security | Networking \* | Availability Zone | Post-Creation | Advanced Options

**Key Pair** ⓘ

Select a key pair [v] [+

Control access to your instance via key pairs, security groups, and other mechanisms.

**Security Groups** ⓘ

- ☐ https
- ☐ TwitterS
- ☐ test-group
- ☐ twitterT
- ☐ MQTT
- ☐ tcp-all
- ☐ nyht
- ☒ default
- ☐ couchdb
- ☐ icmp
- ☐ ssh
- ☐ 001
- ☐ couchbase

Cancel Launch

## Importing a new key pair

To import a new key pair, you need to follow three steps as numbered and shown in the figure below. First, you need to give a name to the new key pair. Then, if you are using a Unix-based operating system such as Linux or OS X, launch a new terminal and enter the following command: **ssh-keygen -t rsa -f cloud.key**

**Import Key Pair** ×

**Key Pair Name: \***

**Public Key: \***

**Description:**

Key Pairs are how you login to your instance after it is launched.

Choose a key pair name you will recognise and paste your SSH public key into the space provided.

SSH key pairs can be generated with the `ssh-keygen` command:

```
ssh-keygen -t rsa -f cloud.key
```

This generates a pair of keys: a key you keep private (`cloud.key`) and a public key (`cloud.key.pub`). Paste the contents of the public key file here.

After launching an instance, you login using the private key (the username might be different depending on the image you launched):

```
ssh -i cloud.key ubuntu@<instance_ip>
```

or:

```
ssh -i cloud.key ec2_user@<instance_ip>
```

Cancel Import Key Pair

Note that you can substitute “cloud.key” with any other name that you prefer and it doesn’t have to be same as the name you entered in the previous step. After running the above command, two files will be created in your current working directory, which are `cloud.key` and `cloud.key.pub`. `cloud.key` is your private key that you should keep it in a safe place and will be used to connect to the instance. To successfully import your new key pair, copy and paste the contents of `cloud.key.pub` file in the appropriate box marked as number 3 in the above figure and finally click the “Import Key Pair” button.

In case you are using Windows, you need to download PuTTY<sup>1</sup> and follow the instructions provided on their website to create a key pair and then follow aforementioned steps. You can also use PuTTY to connect to your instance using the SSH protocol.

- 7- If you want to create your instance in an availability zone other than the default one, you can go to the “Availability Zone” tab and choose your desired zone after clicking the “Advanced” button as shown in the picture below.

---

<sup>1</sup> <http://www.putty.org>

## Launch Instance ✕

Details \*

Access & Security

Networking \*

Availability Zone

Post-Creation

Advanced Options

**Availability Zone ?**

- ☒ (Any availability zone)
- ☐ NCI
- ☐ QRIScloud
- ☐ intersect
- ☐ intersect-01
- ☐ intersect-02
- ☐ melbourne
- ☐ melbourne-np
- ☐ melbourne-qh2
- ☐ monash
- ☐ monash-01
- ☐ monash-02
- ☐ monash-03
- ☐ pawsey
- ☐ pawsey-01
- ☐ pawsey-01-test
- ☐ sa
- ☐ tasmania

Basic

Location for your Virtual Machine.

In most cases, you shouldn't change the default. However, should you require special access to data, instruments or infrastructure you may select an availability zone.

Cancel

Launch

8- When all the configuration is set, you may now click the launch button to finalize new instance creation process.