

Creating Virtual Machines Using NeCTAR Dashboard

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

Project / Compute / Overview

Limit Summary

Resource	Used	Limit
Instances	Used 0 of 2	2
VCPUs	Used 0 of 2	2
RAM	Used 0 Bytes of 8GB	8GB
Floating IPs	Allocated 0 of 0	0
Security Groups	Used 4 of 30	30
Volumes	Used 0 of 0	0
Volume Storage	Used 0 Bytes of 0 Bytes	0 Bytes
Shares	False 0 of 0	0
Share Storage	False 0 of 0	0
Share Snapshots	False 0 of 0	0
Share Snapshots Storage	False 0 of 0	0
Share Networks	False 0 of 0	0

Usage Summary

Select a period of time to query its usage:
The date should be in YYYY-MM-DD format.

2019-02-17 to 2019-02-18 [Submit](#)

Active Instances:	Active RAM:
0	0 Bytes
This Period's VCPU-Hours:	0.00
This Period's GB-Hours:	0.00
This Period's RAM-Hours:	0.00

[Download CSV Summary](#) [Download Juju Environment File](#)

Instance Name	VCPUs	Disk	RAM	Time since created
No items to display.				

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

Project / Compute / Overview

Limit Summary

Resource	Used	Limit
Instances	Used 0 of 2	2
VCPUs	Used 0 of 2	2
RAM	Used 0 Bytes of 8GB	8GB
Floating IPs	Allocated 0 of 0	0
Security Groups	Used 4 of 30	30
Volumes	Used 0 of 0	0
Volume Storage	Used 0 Bytes of 0 Bytes	0 Bytes
Shares	False 0 of 0	0
Share Storage	False 0 of 0	0
Share Snapshots	False 0 of 0	0
Share Snapshots Storage	False 0 of 0	0
Share Networks	False 0 of 0	0

Usage Summary

Select a period of time to query its usage:
The date should be in YYYY-MM-DD format.

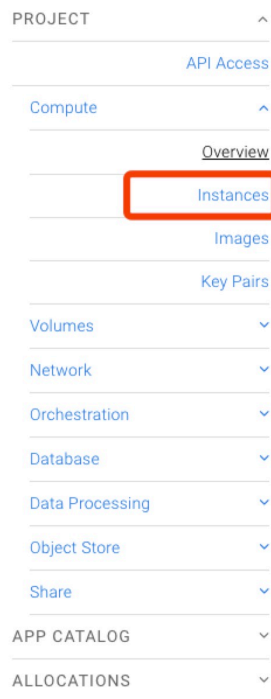
2019-02-17 to 2019-02-18 [Submit](#)

Active Instances:	Active RAM:
0	0 Bytes
This Period's VCPU-Hours:	0.00
This Period's GB-Hours:	0.00
This Period's RAM-Hours:	0.00

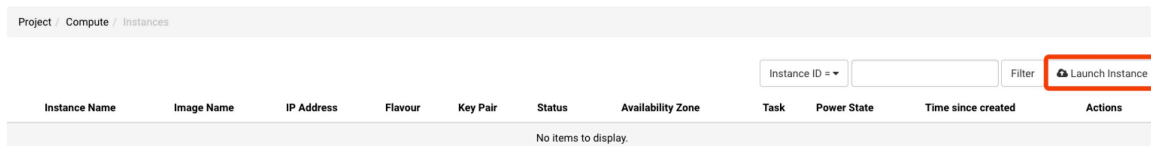
[Download CSV Summary](#) [Download Juju Environment File](#)

Instance Name	VCPUs	Disk	RAM	Time since created
No items to display.				

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.



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. Specify how many instances of this type you want to create.
3. 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 flavor type in the expanded view.

- Choose whether you want to create the instance from an image file or a previously taken snapshot.
- If you opt to create 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
Source
Flavor
Networks
Security Groups
Key Pair
Configuration
Server Groups
Metadata

Please provide the initial hostname for the instance, the availability zone where it will be deployed, and the instance count. Increase the Count to create multiple instances with the same settings.

Instance Name

1

Description

Availability Zone

melbourne-gh2-uom

Count

1

Total Instances (2 Max)

50%

0 Current Usage
1 Added
1 Remaining

✕ Cancel

< Back

Next >

Launch Instance

Launch Instance

Details
Source
Flavor
Networks
Security Groups
Key Pair
Configuration
Server Groups
Metadata

Flavors manage the sizing for the compute, memory and storage capacity of the instance.

Allocated

Name
VCPUS
RAM
Total Disk
Root Disk
Ephemeral Disk
Public

Select an item from Available items below

Available 4

Select one

Click here for filters.

Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk	Public
> uom.general.1 c4g	1	4 GB	30 GB	30 GB	0 GB	Yes
> uom.general.2 c8g	2	8 GB	30 GB	30 GB	0 GB	Yes
> uom.general.4 c16g	4	16 GB	30 GB	30 GB	0 GB	Yes
> uom.general.8 c32g	8	32 GB	30 GB	30 GB	0 GB	Yes

✕ Cancel

< Back

Next >

Launch Instance

Launch Instance

Launch Instance

Details *
Source *
 Flavor *
 Networks
 Security Groups
 Key Pair
 Configuration
 Server Groups
 Metadata

Instance source is the template used to create an instance. You can use an image, a snapshot of an instance (image snapshot), a volume or a volume snapshot (if enabled). You can also choose to use persistent storage by creating a new volume.

Note! How images are managed on the Nectar Research Cloud has changed recently. Please see our [knowledge base article](#) on the Nectar Image Service for details.

Select Boot Source

Image

Allocated

Name	Updated	Size	Type	Visibility
Select an item from Available items below				

Available 370

Click here for filters.

Name	Updated	Size	Type	Visibility
> CirrOS 0.4.0 x86_64	12/18/18 10:28 AM	12.13 MB	qcow2	Community
> NeCTAR CentOS 7 x86_64 [v79]	12/17/18 3:15 PM	508.24 MB	qcow2	Community
> NeCTAR CentOS 7 x86_64	12/17/18 3:15 PM	304.13 MB	qcow2	Public
> NeCTAR Ubuntu 18.10 (Cosmic) amd64 [v3]	12/17/18 3:01 PM	311.75 MB	qcow2	Community
> NeCTAR Ubuntu 18.10 (Cosmic) amd64	12/17/18 3:01 PM	307.07 MB	qcow2	Public

- 6- Now select the “Security Groups” 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. Then, select the “Key Pair” tab and choose your key pair from the list if you have created your preferred key before. Otherwise, click the “Create Kay Pair” or “Import Key Pair” button to create/import a new key pair as discussed below.

×

×

Details *

Source *

Flavor *

Networks

Security Groups

Key Pair

Configuration

Server Groups

Metadata

A key pair allows you to SSH into your newly created instance. You may select an existing key pair, import a key pair, or generate a new key pair.

+ Create Key Pair

Import Key Pair

Allocated

Displaying 0 items

Name	Fingerprint
Select a key pair from the available key pairs below.	

Displaying 0 items

▼ Available (1)

Select one

Q

Click here for filters.

X

Displaying 1 item

Name	Fingerprint
> ubuntu	f1:2d:cc:16:0f:07:1c:2e:2c:bd:9f:86:3c:37:3b

Displaying 1 item

Cancel

< Back

Next >

Launch Instance

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 Pairs are how you login to your instance after it is launched. Choose a key pair name you will recognize and paste your SSH public key into the space provided.

Key Pair Name *

1

Public Key *

2 - run "ssh-keygen -t rsa -f cloud.key"

3

✕ 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 PuTTY¹ 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 choose your desired zone in the “Details” section as shown in the picture below.

Launch Instance

Details

Please provide the initial hostname for the instance, the availability zone where it will be deployed, and the instance count. Increase the Count to create multiple instances with the same settings.

Instance Name *

Description

Availability Zone

melbourne-qn2-uom

Count *

1

Total Instances (2 Max)

50%

0 Current Usage
1 Added
1 Remaining

Buttons: Cancel, < Back, Next >, Launch Instance

¹ <http://www.putty.org>

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