CSE 383
Module 11
OpenStack

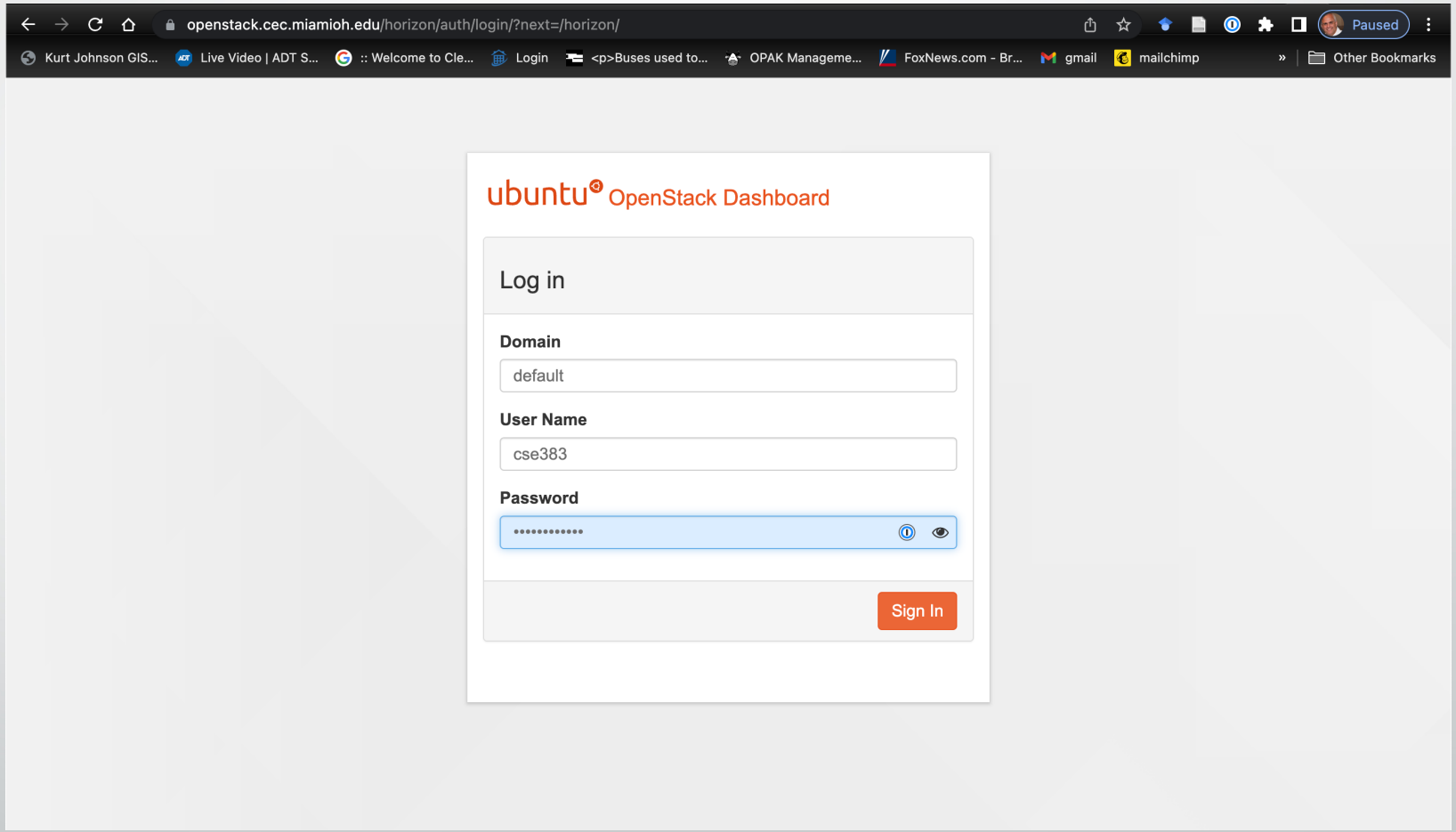
Login

https://openstack.cec.miamioh.edu/

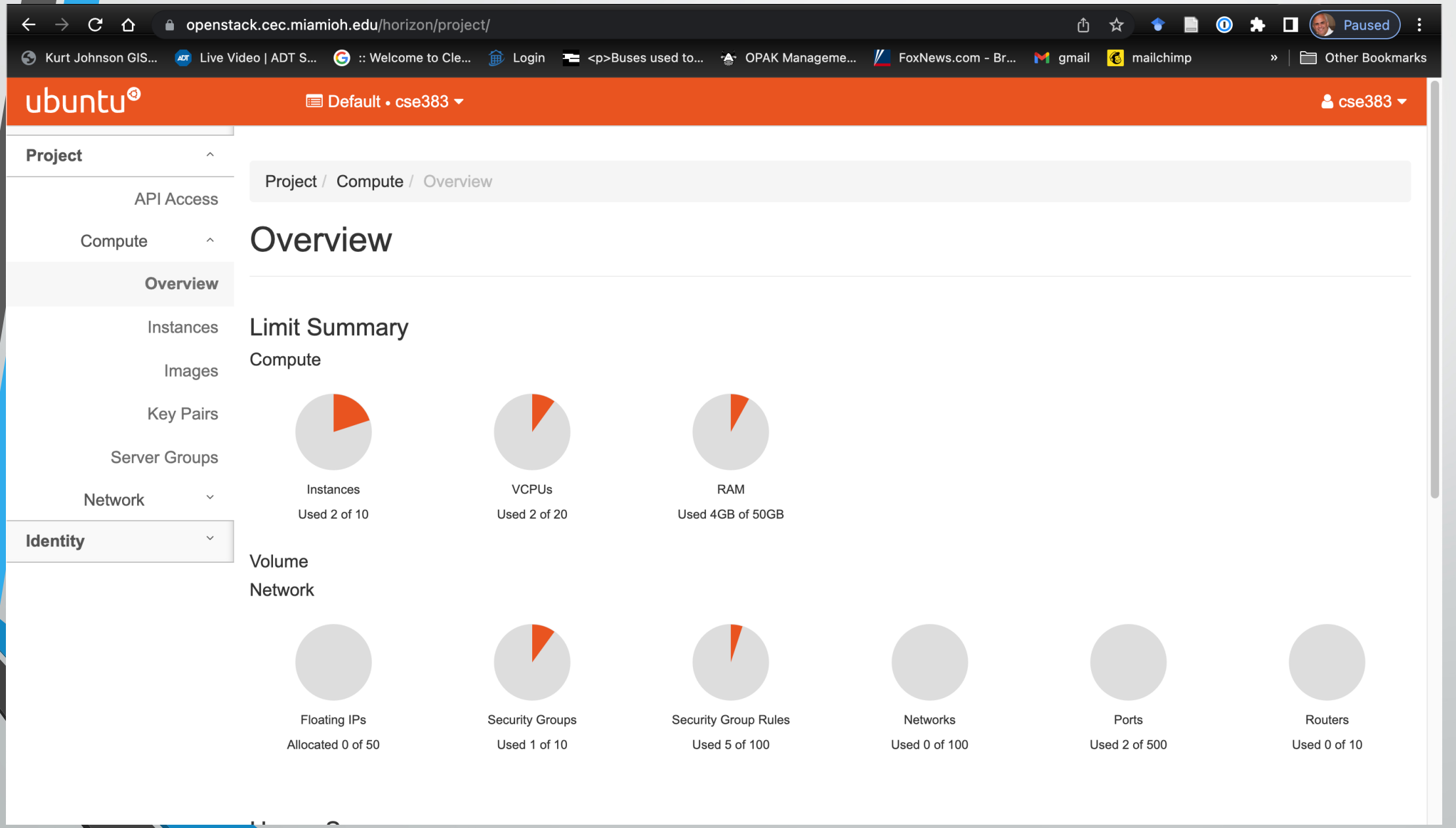
Domain: default

User Name: cse383

Password: (as given)

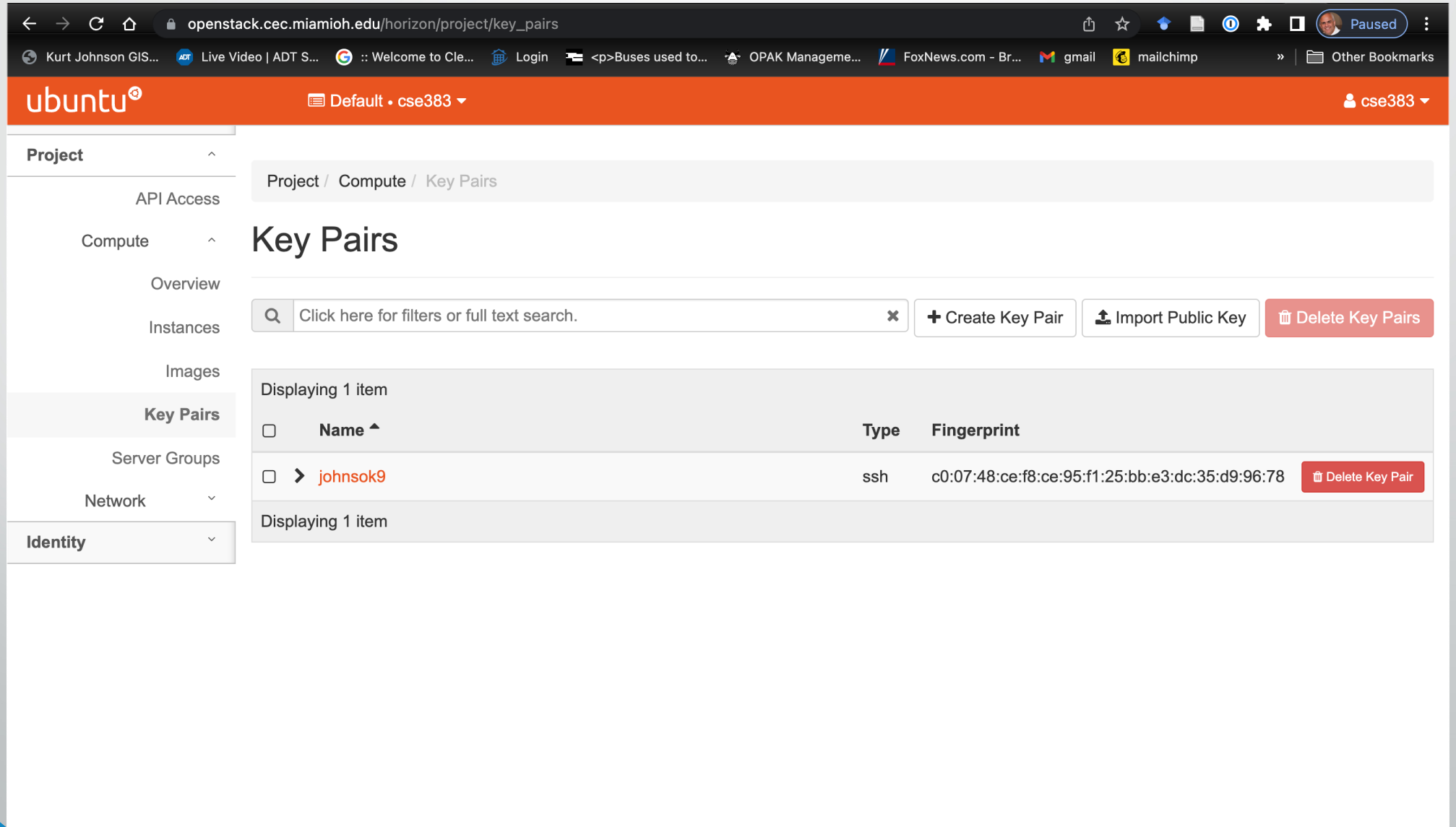


Brings up Dashboard



Set up “Key Pairs”

Under Compute – Select Key pairs



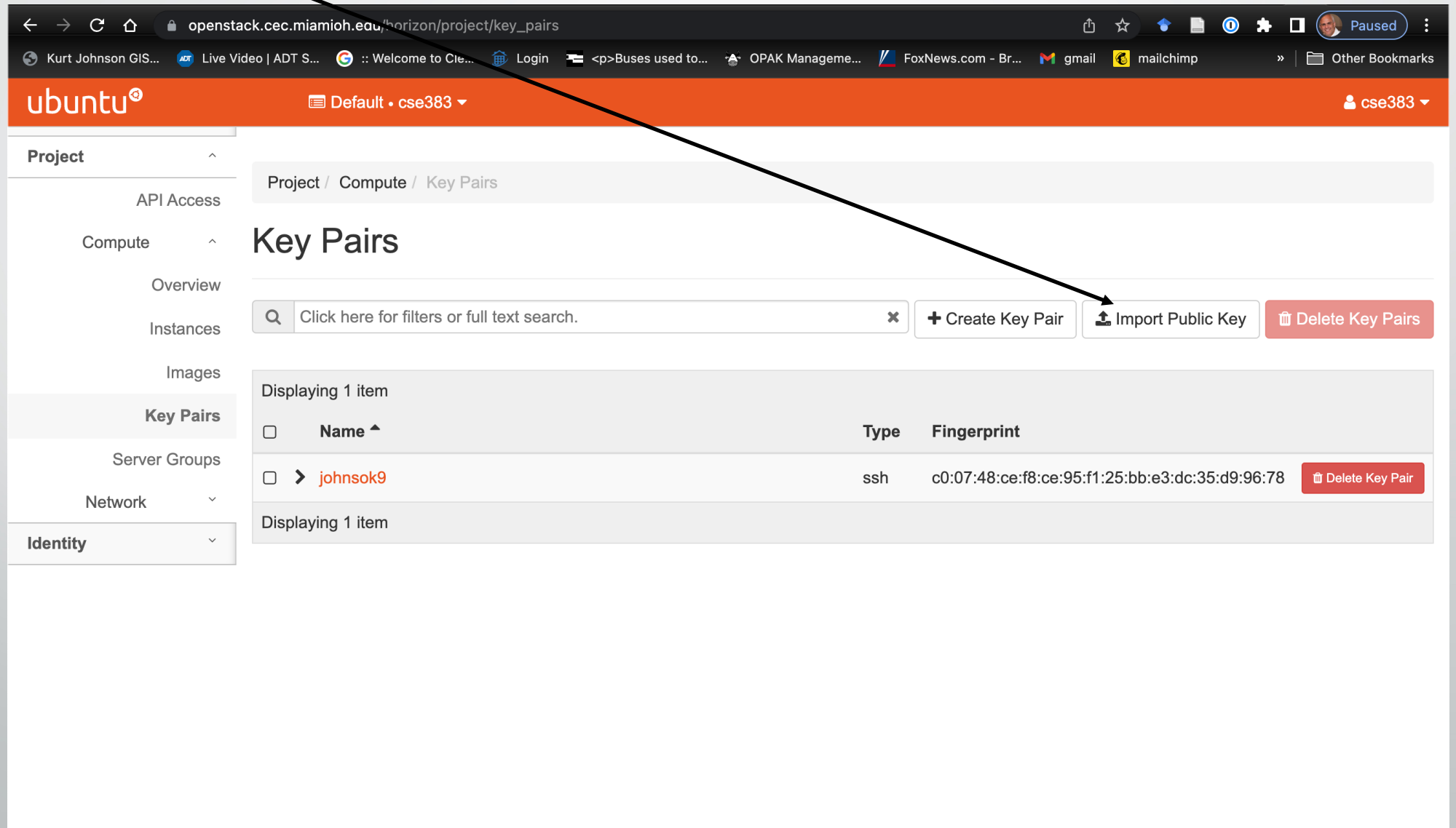
Login to Ceclinux to prepare Keypair

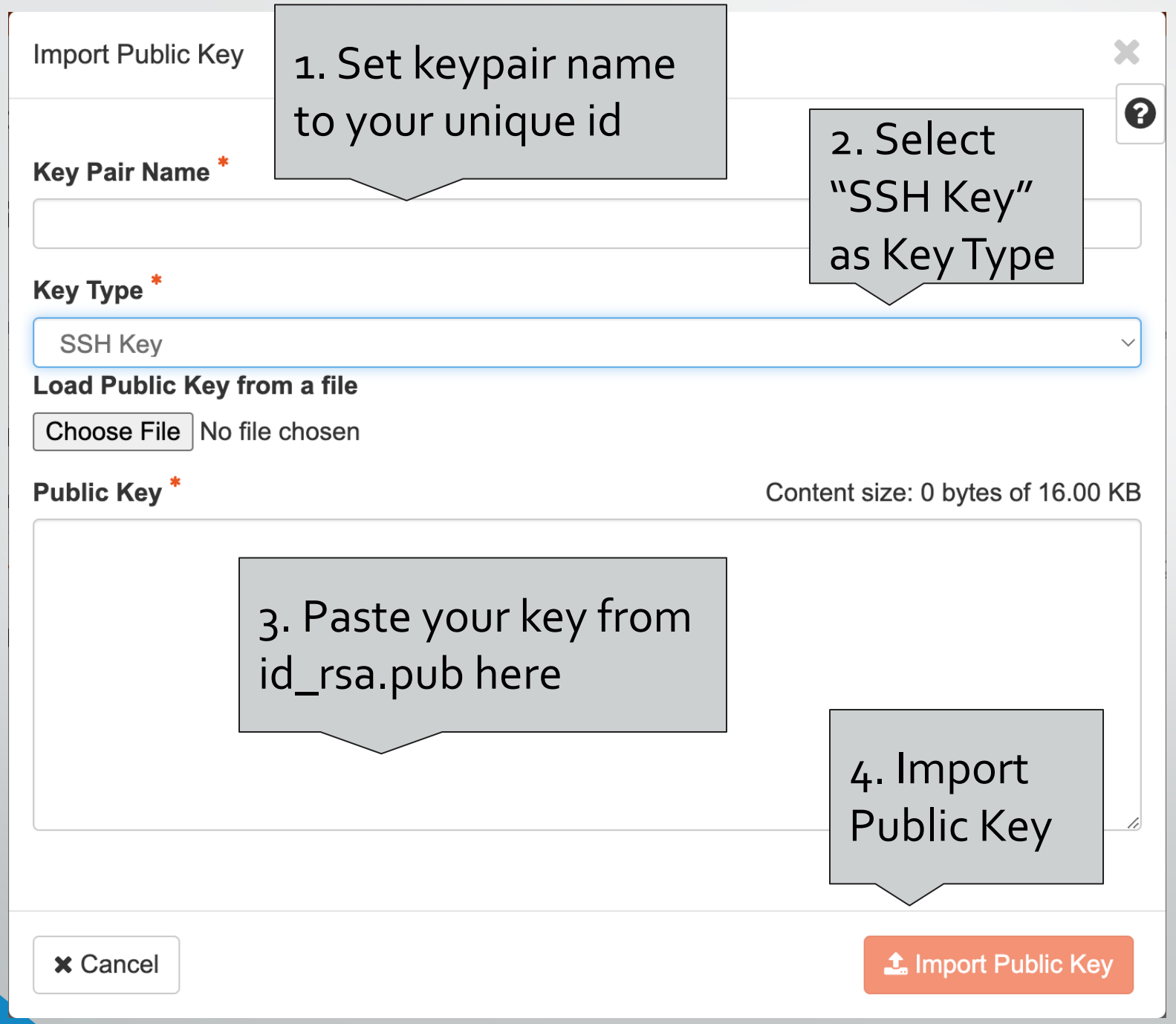
1. Log into ceclinux01
2. Type: cat ~/.ssh/id_rsa.pub
3. (do NOT try to use id_ed25519, our git key)
4. If no file found, then create it by
    1. ssh-keygen –t rsa (hit enter at all prompts without entering any response to get default settings)
    2. When complete – retry step 2
5. Copy the entire output of step 2 (my key is shown below as an example)

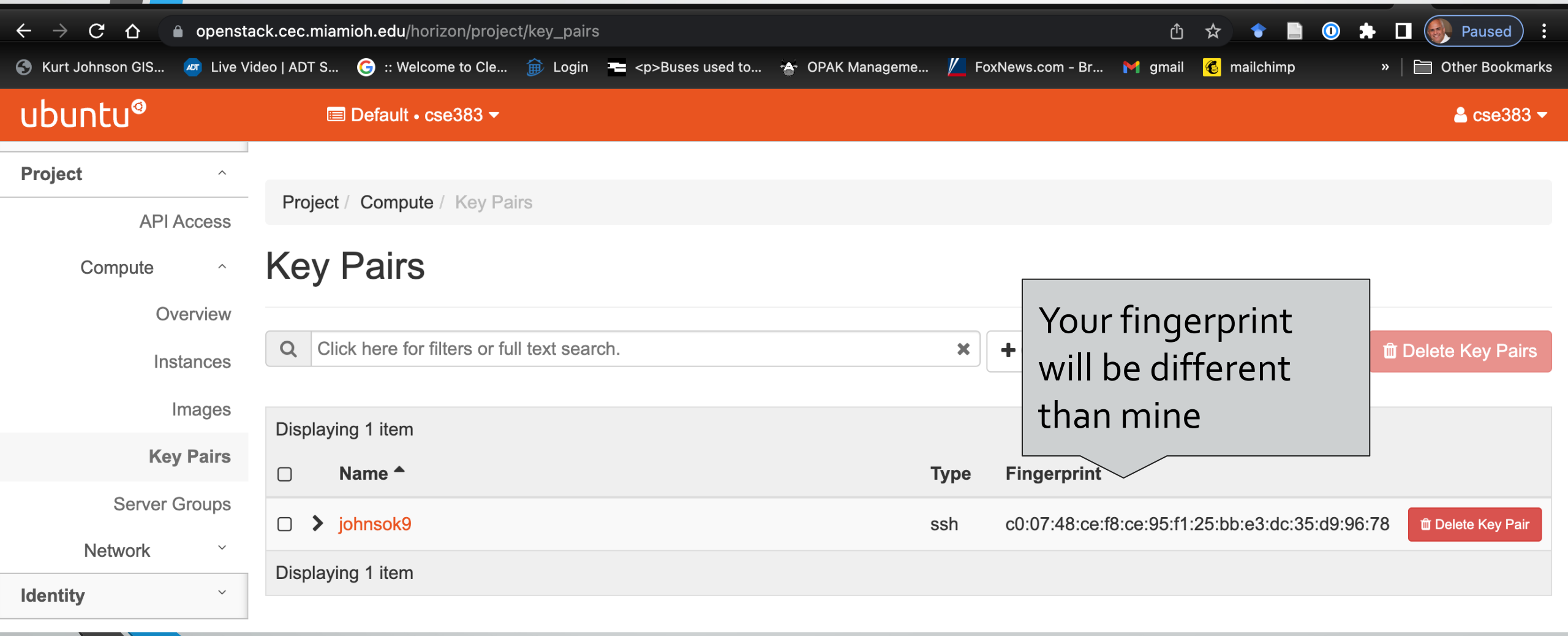
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCzlIVC//VYTzb4JXhuwF6eUNig4d5teJNl4ekf1kWY8LG7EIonDemhvtgW+guuhOh/T+2EWpuo9ssflcBmUXcoVzdVqbvdo6QCD1ePWKb4pbI9N43GxfK63ZFJ9EJJcuGmY77BlTjszXZWKiuNehnKm3Z6aYuZMiqJqXPM+BEs8oxGUa/Ooax7+VcwH5YsUrOgkGNL/gRvzN2s78Usqnmrq1FjWxrRNbf5vmmPatWfTEDJbo1JLs1nUZSZcP7UOd3jYL3DpqYrBitZ3xBZg1+eAPqFfluAP5pEAS+6YiW/mKTdWupk61BZoA89lkaASBTptVNm7g1NdG2Gl7aVnYZx johnsok9@ceclnx01

Import Keypair (on OpenStack console)

Import Public Key

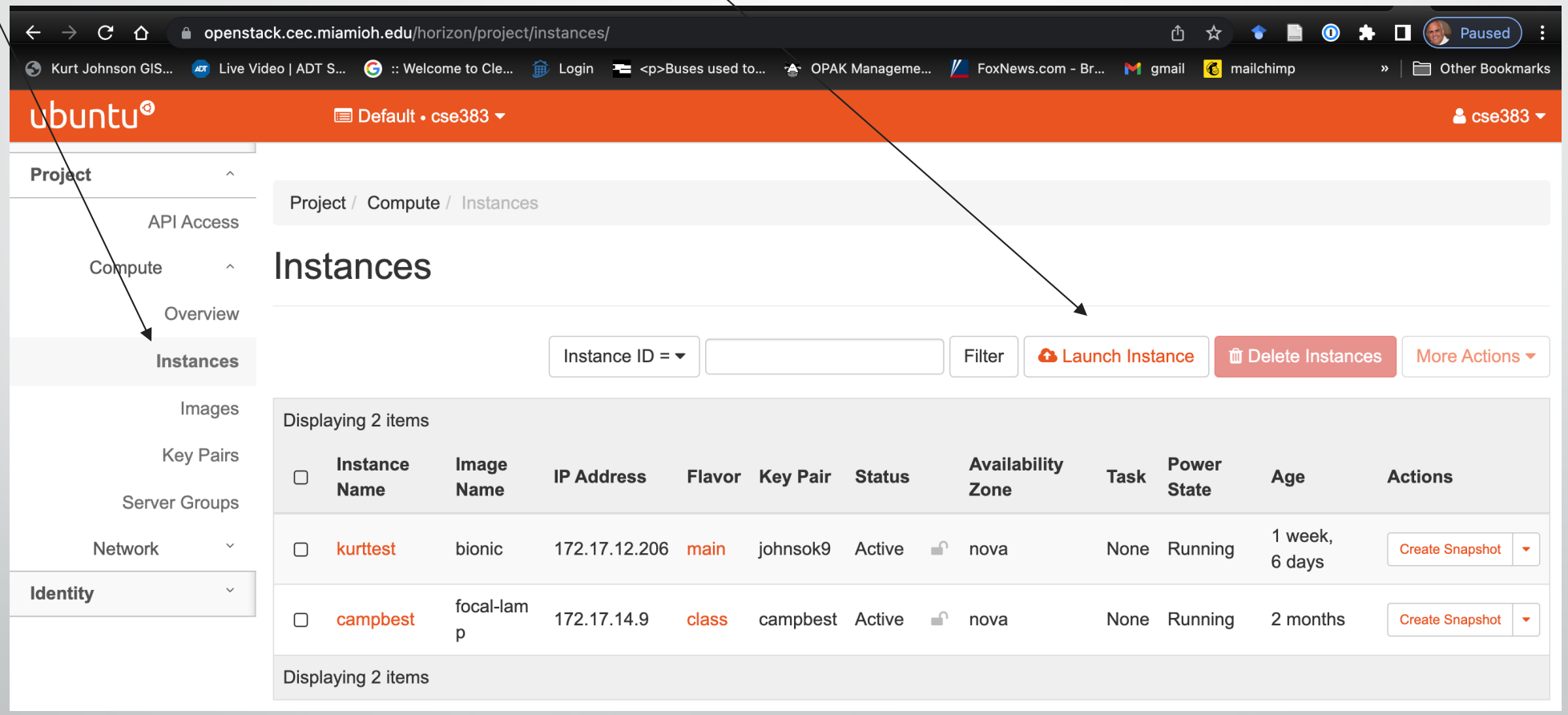



Import Public Key
1. Set keypair name to your unique id
Key Pair Name *
2. Select "SSH Key" as Key Type
Key Type *
SSH Key
Load Public Key from a file
Choose File No file chosen
Public Key *
Content size: 0 bytes of 16.00 KB
3. Paste your key from id_rsa.pub here
4. Import Public Key
Cancel
Import Public Key

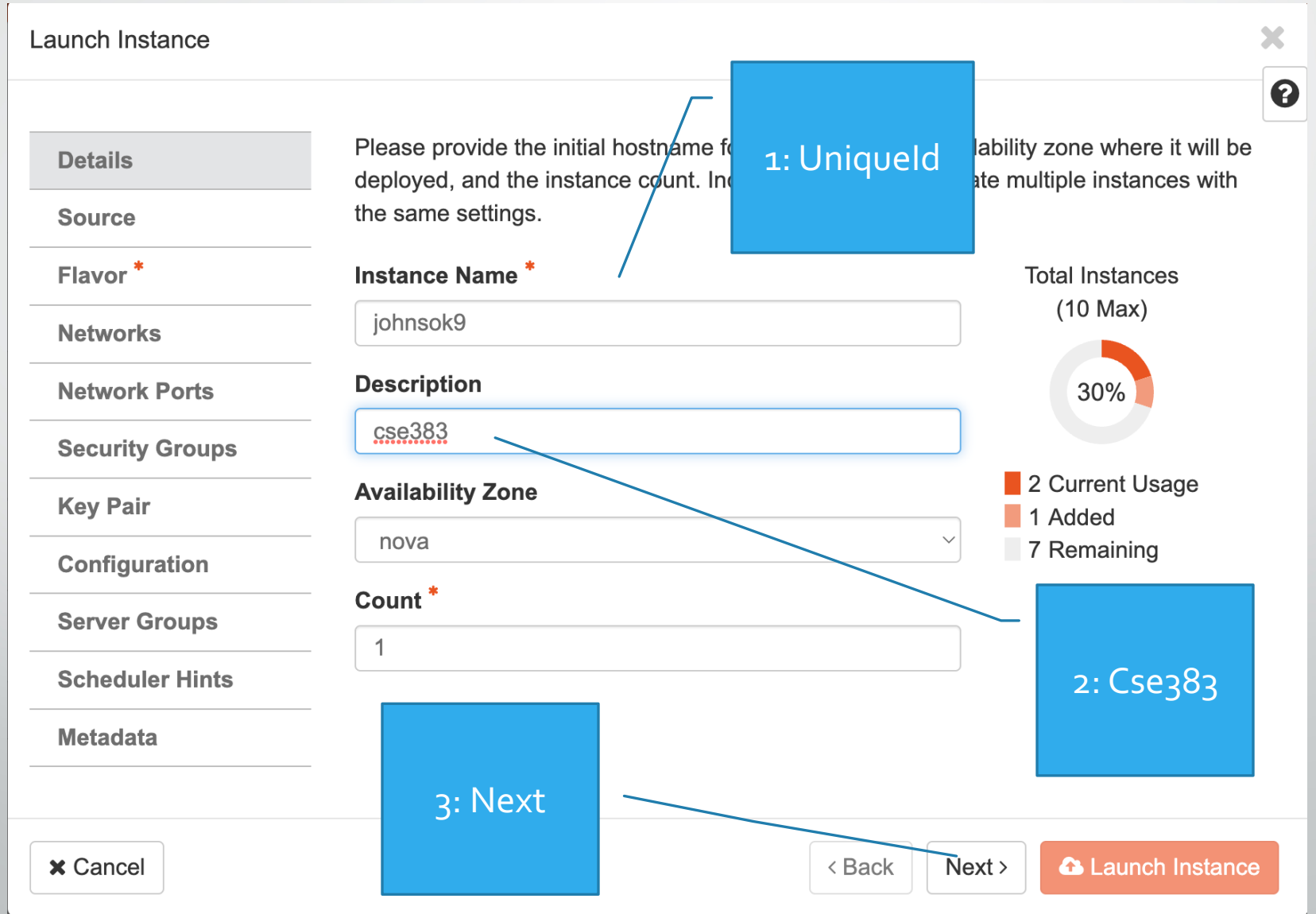

openstack.cec.miamioh.edu/horizon/project/key_pairs
Paused
Kurt Johnson GIS...
Live Video | ADT S...
:: Welcome to Cle...
Login
<p>Buses used to...
OPAK Manageme...
FoxNews.com - Br...
gmail
mailchimp
Other Bookmarks
ubuntu
Default • cse383
cse383
Project
API Access
Compute
Overview
Instances
Images
Key Pairs
Server Groups
Network
Identity
Project / Compute / Key Pairs
Key Pairs
Click here for filters or full text search.
Delete Key Pairs
Displaying 1 item
Name
Type
Fingerprint
johnsok9
ssh
c0:07:48:ce:f8:ce:95:f1:25:bb:e3:dc:35:d9:96:78
Delete Key Pair
Displaying 1 item
Your fingerprint will be different than mine

Launch Instance

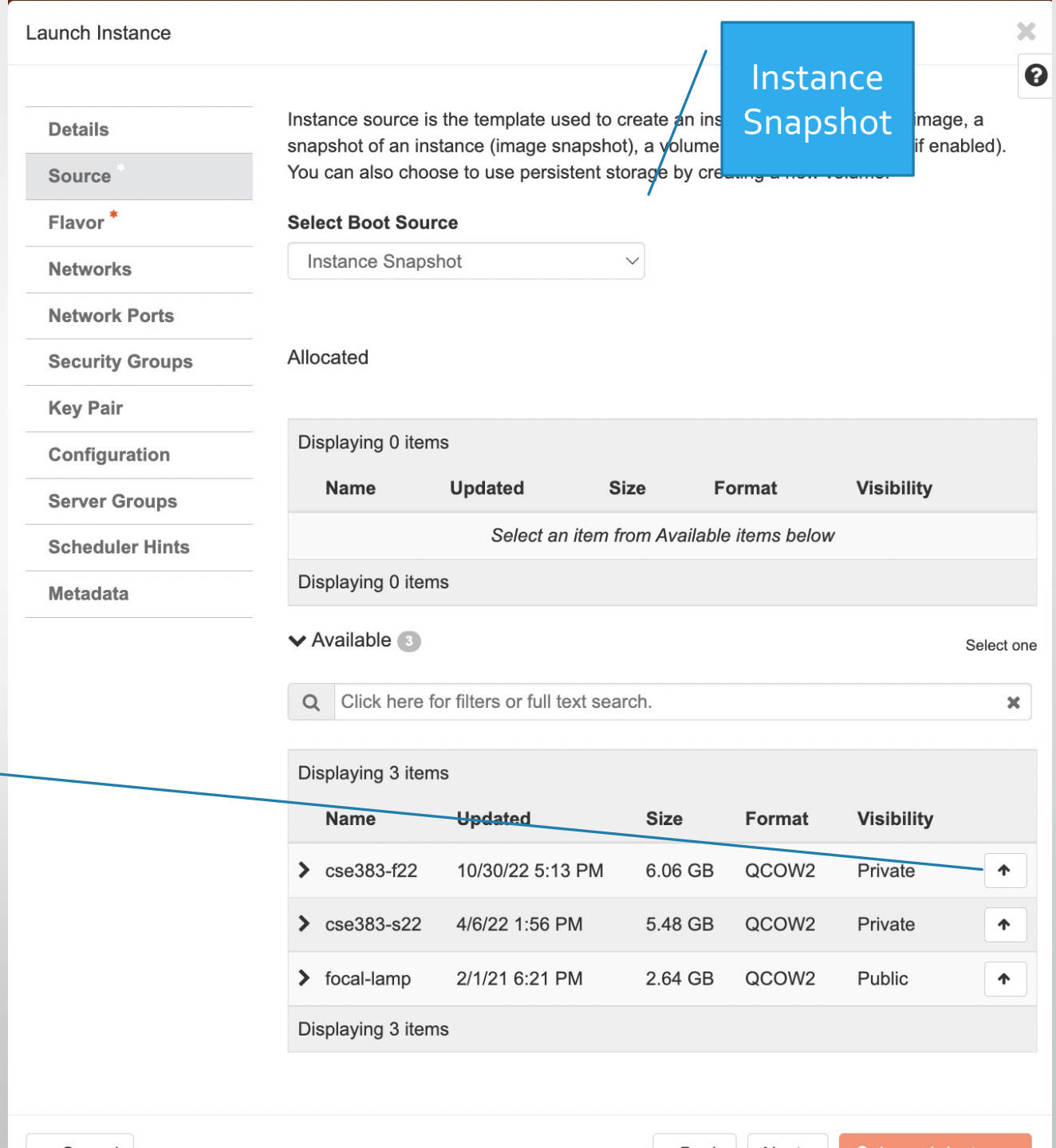
From "Instances" menu on left. Select "Launch Instance"



Launch Instance - Details



Select Source (1)

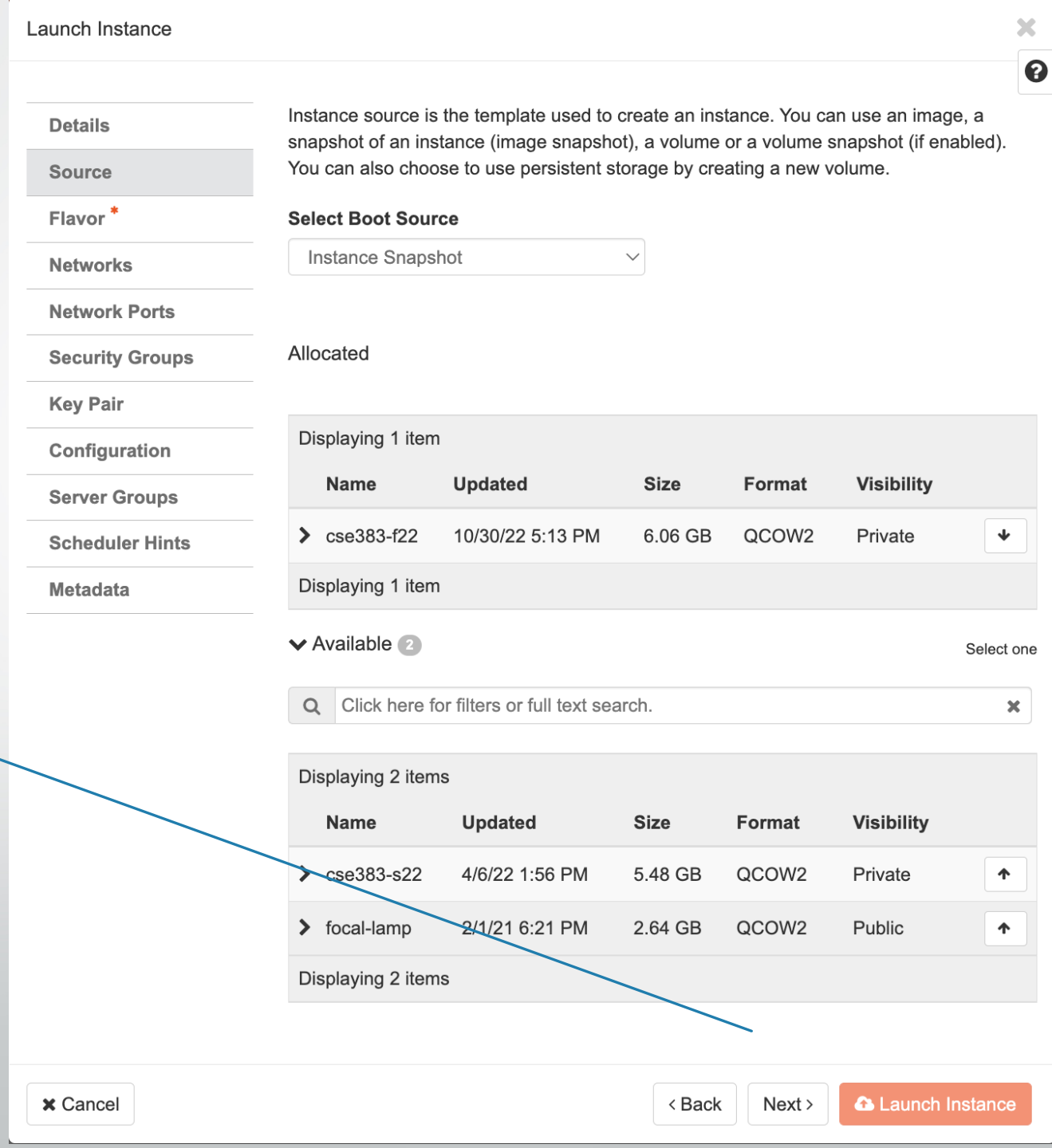


Instance Snapshot

Press UP To Select

Select Source (2)

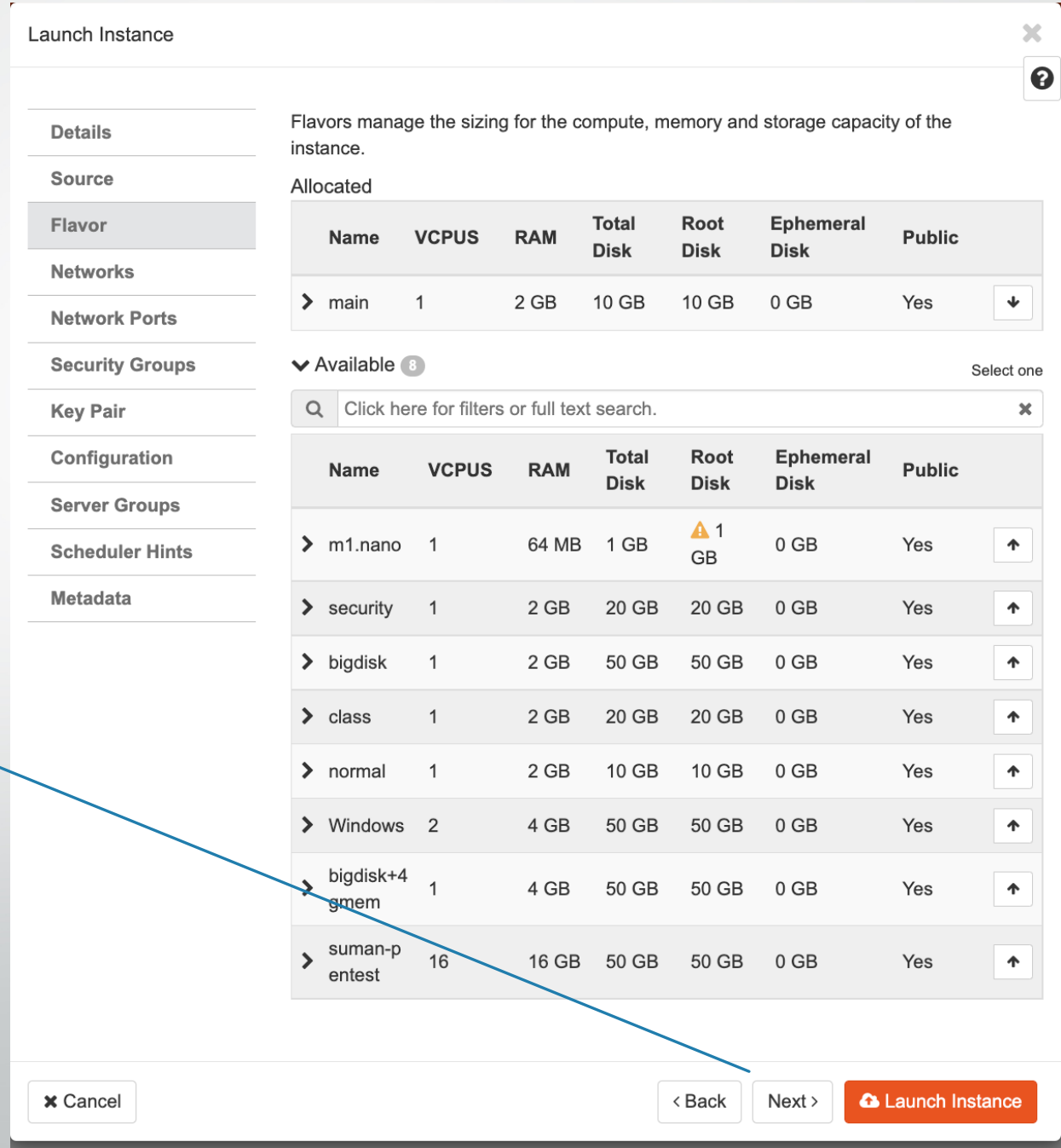
Select Next



Select Flavor (instance type)

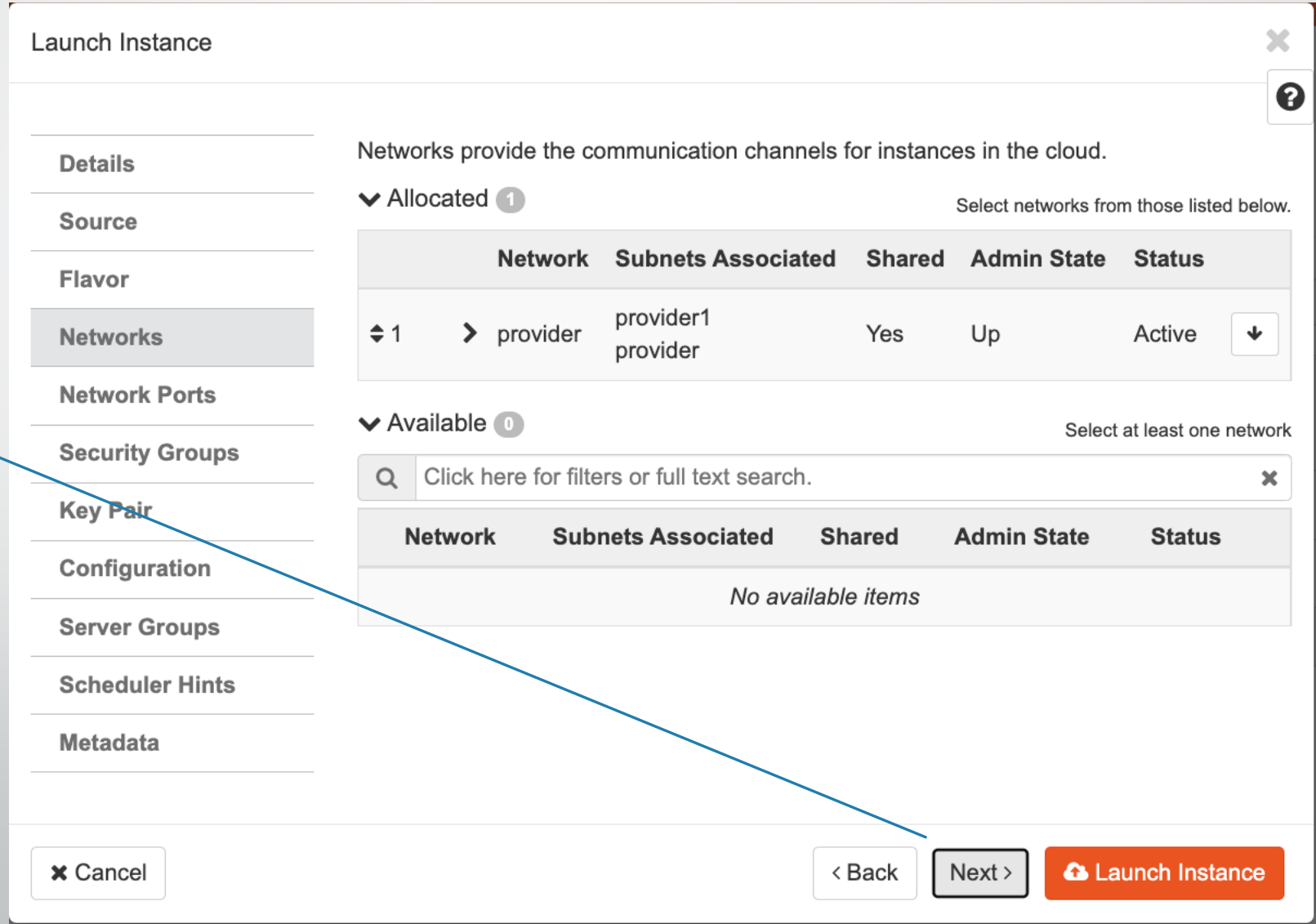
Press Up arrow next to Main – so that it moves from Available to Allocated

Select Next



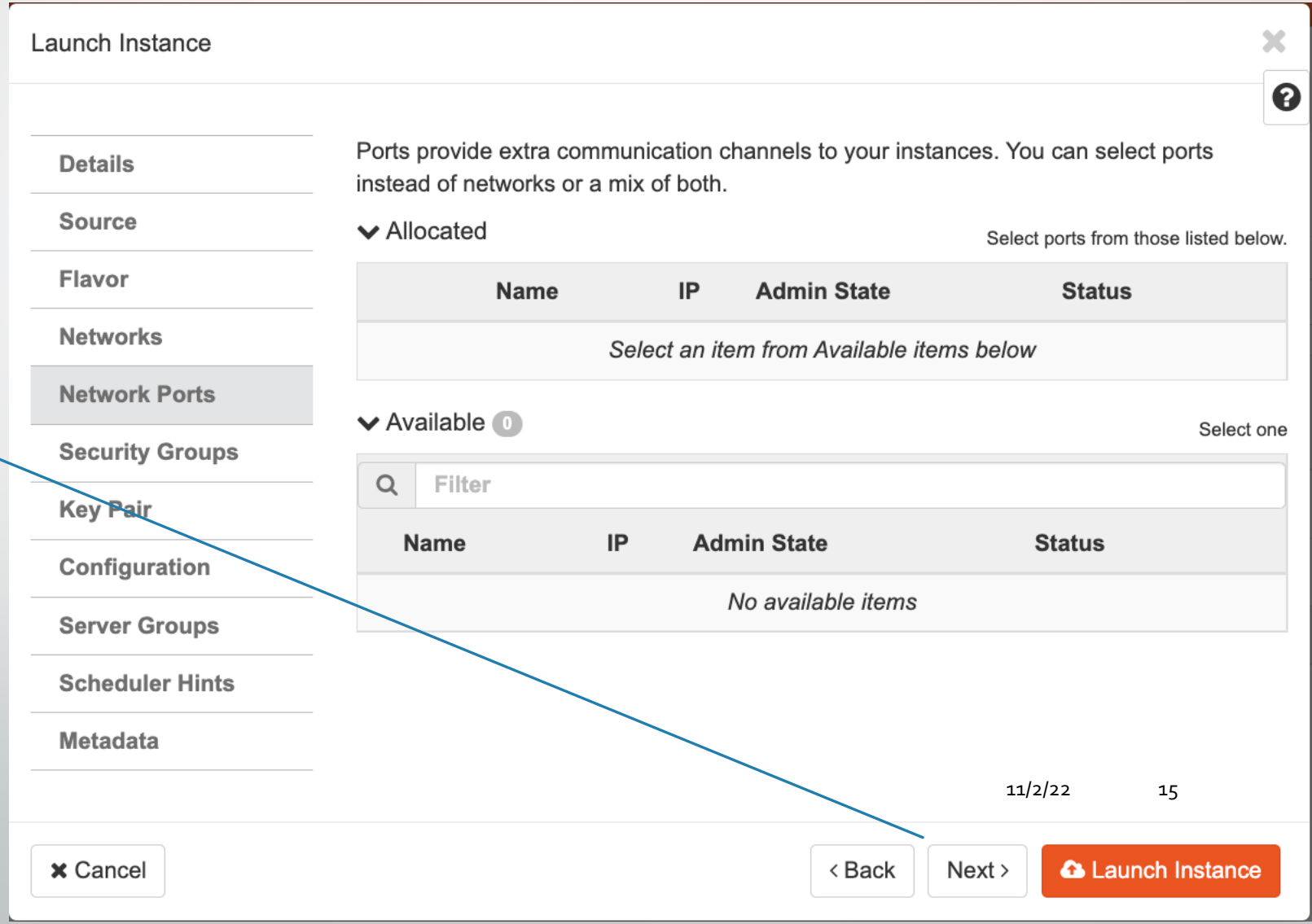
Networks

Select Next



Network Ports

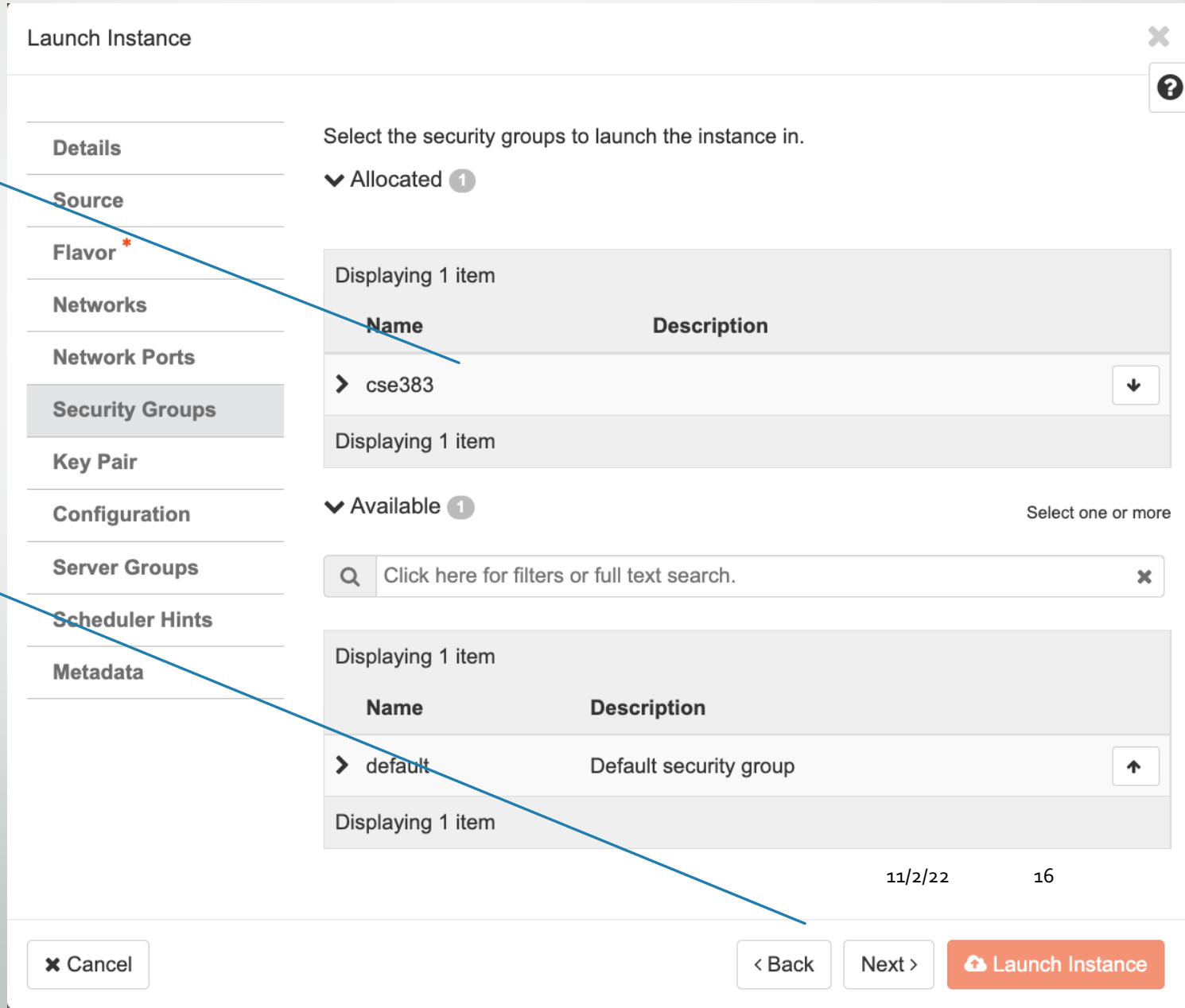
Select Next



Security Groups

Make sure cse383 Security group is selected – and default is un-selected (Available)

Select Next

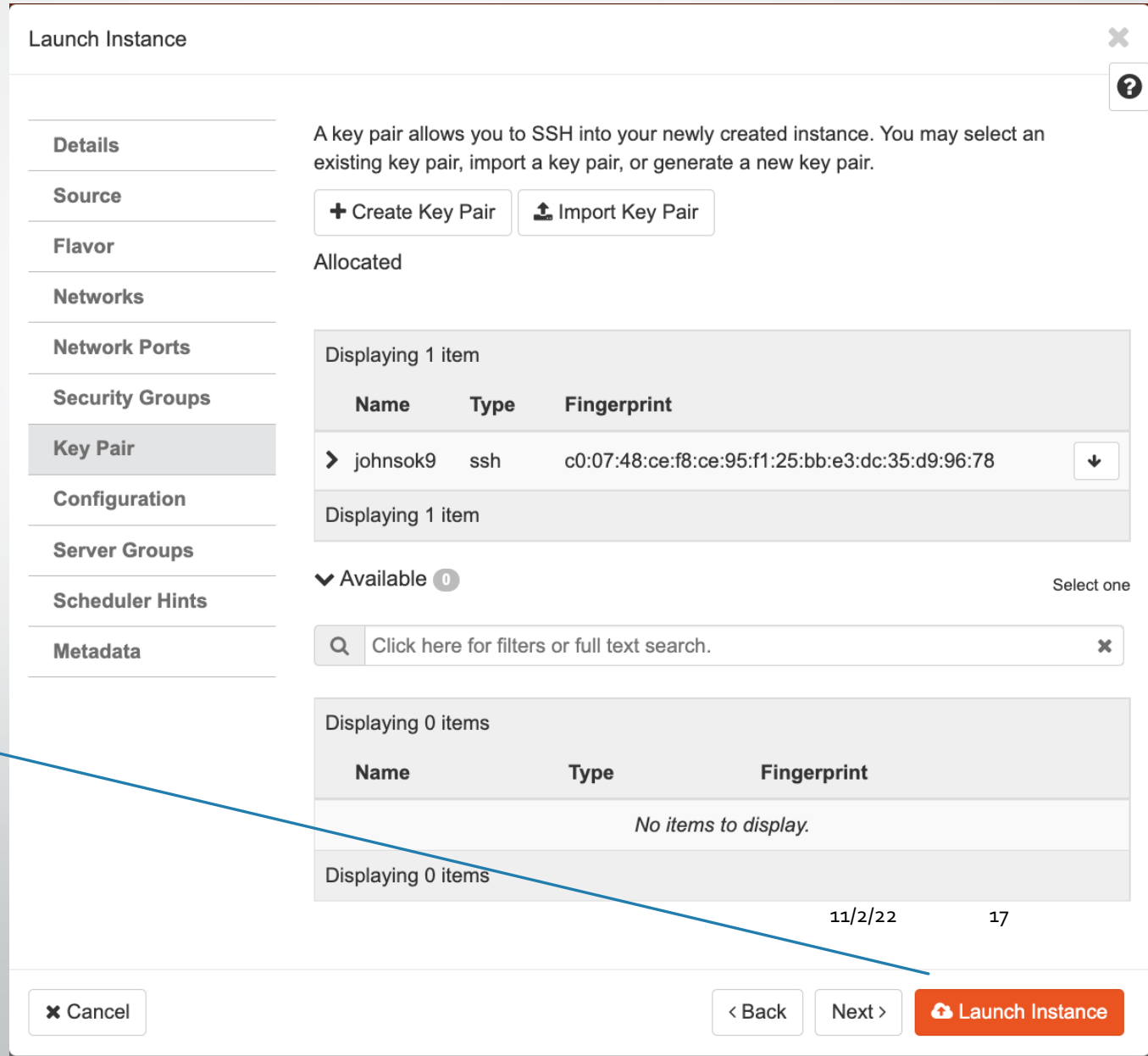


Key Pair

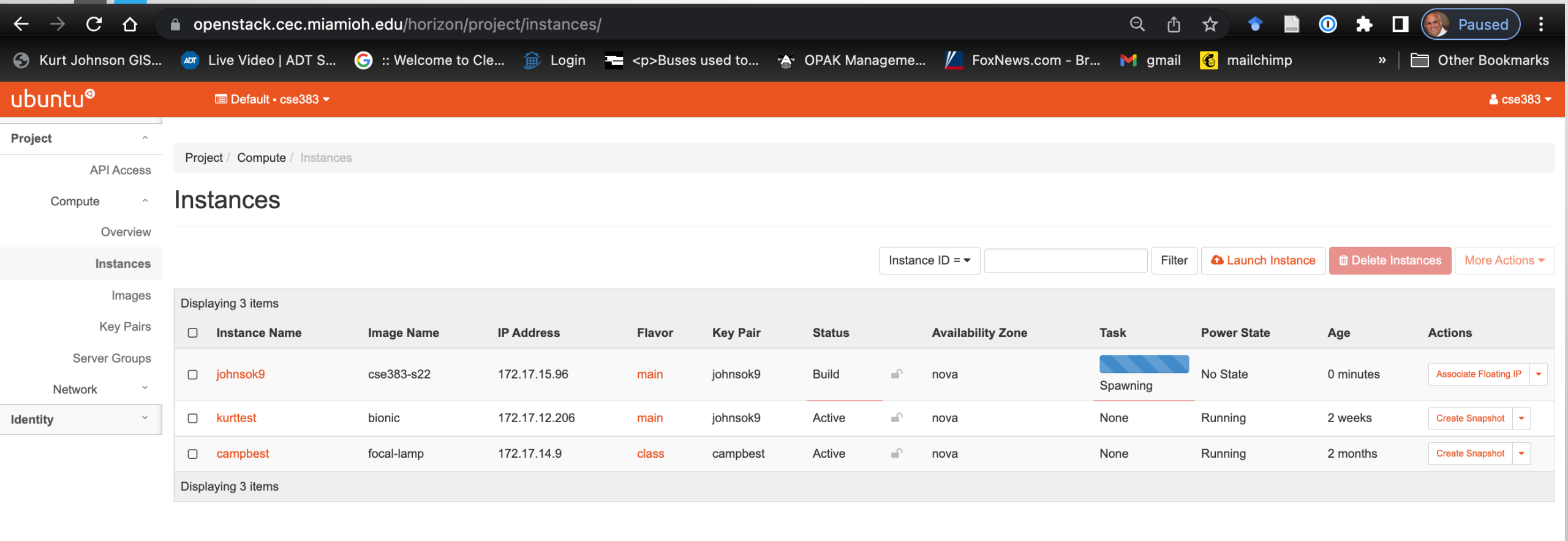
Press Up arrow next to your Unique ID (if it is not available – cancel – and repeat the key import process) – so that it moves from Available to Allocated.

This example shows my key pair selected (use yours – not mine)

Select Launch Instance

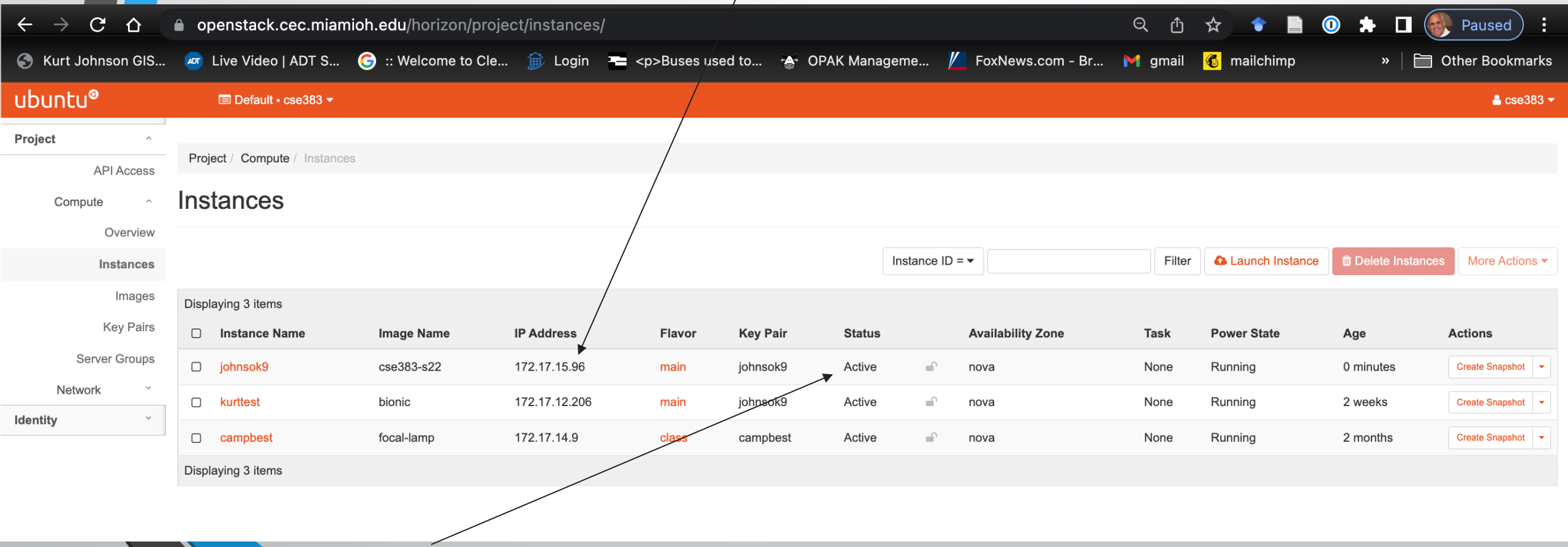


Instance being created – and booting



Go back to instances and find IP address.

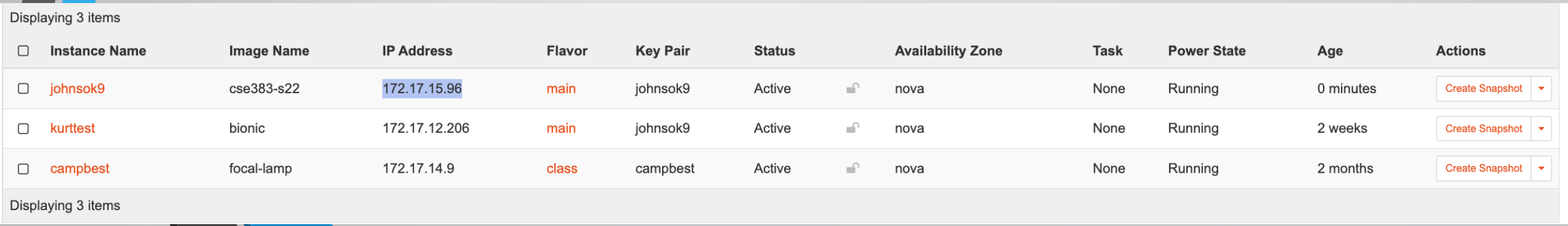
Your public ip is on the instances page



status

ssh as the ubuntu user to your new instance from ceclnx01.
(will take 3-4 minutes before ready)

ssh ubuntu@IP
(my example is: 172.17.15.96)
(use the ip from your instance)



Displaying 3 items

Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Age	Actions
johnsok9	cse383-s22	172.17.15.96	main	johnsok9	Active	nova	None	Running	0 minutes	Create Snapshot
kurttest	bionic	172.17.12.206	main	johnsok9	Active	nova	None	Running	2 weeks	Create Snapshot
campbest	focal-lamp	172.17.14.9	class	campbest	Active	nova	None	Running	2 months	Create Snapshot

Displaying 3 items

```
johnsok9@ceclnx01:~$ ssh ubuntu@172.17.14.146
The authenticity of host '172.17.14.146 (172.17.14.146)' can't be established.
ECDSA key fingerprint is SHA256:Evo5zqxKDcSjIvnmbVLKmT+/z25pnN6Ui9dYTfaVkq8.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.17.14.146' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.4.0-107-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

 System information disabled due to load higher than 1.0

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

   https://ubuntu.com/blog/microk8s-memory-optimisation

0 updates can be applied immediately.


Last login: Wed Apr  6 13:45:49 2022 from 134.53.148.193
ubuntu@kj2:~$
```

Next Steps - prepare database software

1) sudo su (this makes you root)
2) Cd /var/www/html
3) wget https://bitbucket.org/phpliteadmin/public/downloads/phpLiteAdmin_v1-9-8-2.zip
    a) unzip phpLiteAdmin_v1-9-8-2.zip
4) vim phpliteadmin.php (or nano if you prefer)
    a) Set $password to any password you want
    b) Set $directory to "/home/ubuntu/cse383/database"
5) Ctrl-D (exit out of sudo) (or type exit)

Next Steps – verify web server

1) As user ubuntu
2) cd /var/www/html
3) sudo vim index.html (or your editor)
    a) sudo nano index.html (if you prefer nano)
    b) Find the "Apache2 Ubuntu Default Page" and change it to "Hello and welcome from ID (your id)"

Set web password

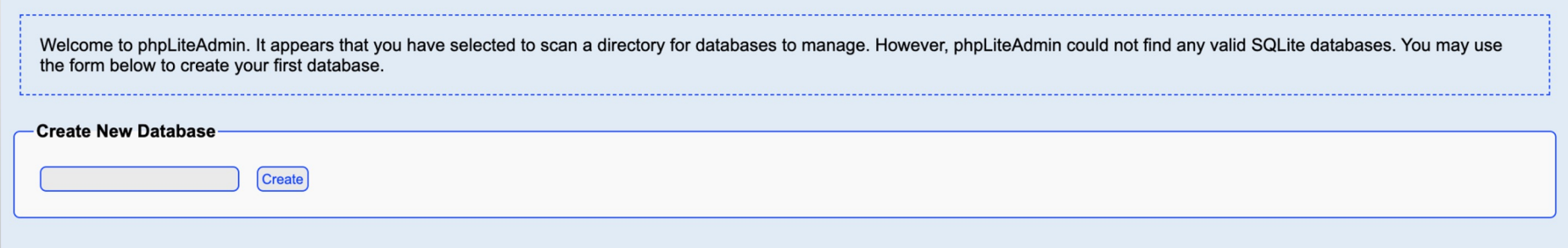
- htpasswd /home/ubuntu/.htpasswd USERNAME (make up your own username)
- Enter the password
- Re-enter the password

Test web server

1) Test the web page at
   a) http://IP (your IP Address of the server)
   b) Note: http not https

   c) If nothing happens - you have not used the correct security group (slide 16)

   d) Verify your new message appears
2) Test the Database Admin program
   a) http://IP/phpliteadmin.php
3) Should ask for password and then show



If not - verify all steps in slides 22 and slide 23

End of Presentation