

# SYS-350 Milestone 8 - OpenStack Host

🔥 Rather than wiping and rebuilding our esxi servers, we are going to use spare SuperMicro servers to build an xubuntu based virtualization host.

We are using a GUI on xubuntu as many of the single host tools only listen on localhost and it's nice to have a browser available to usesys on the host.

**This is a partner Lab: Pair up and we will assign you a SuperMicro to use**

Consult the OpenStack Assignments [sheet](#) to see which host you are getting. Your job will be to install xubuntu 22.04 desktop on your assigned host.

## Task 1: Prepare USB Installer

Download xubuntu-22.04 Desktop iso from:

- 192.168.7.240/isos OR
- 192.168.7.241/isos

Create bootable usb with [RUFUS](#) defaults, 16kb block size

## Task 2: Prepare Super for installation

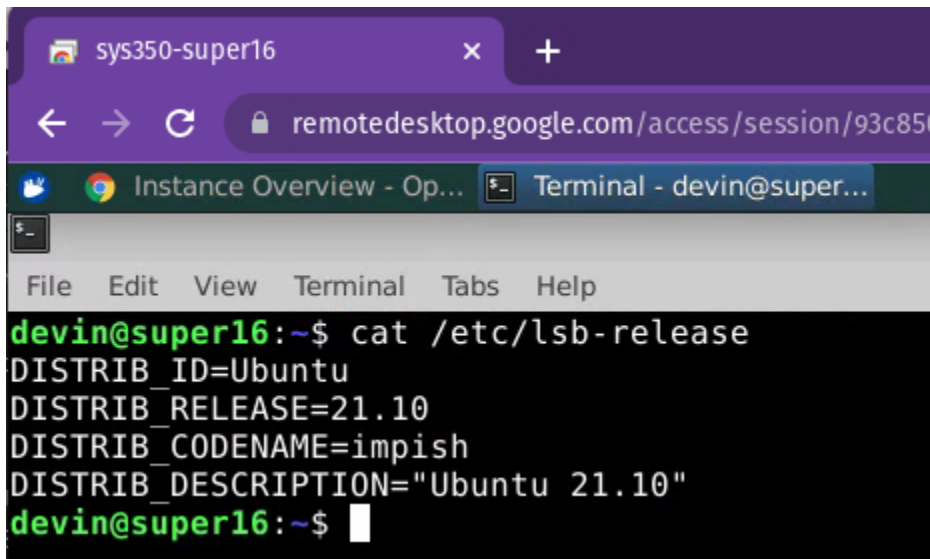
1. Work with Instructors to get IPMI IP address
2. Acquire IPMI password from sticker on front of Super
3. Update instructors with password info so it can be recorded
4. Connect USB to Super
5. Connect to super via IPMI
6. Launch iKVM

## Task 3: Install Xubuntu on Super

1. Reboot Super and use f11->boot menu, boot from UDISK (USB)
2. Install Ubuntu
  - Don't upgrade Ubuntu
3. Configure networking per assignment and make sure it has network access
4. Install Chrome Remote Desktop so you can access from Workstation

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Deliverable 1. Provide a Screenshot that Shows the CRD Banner and the running version of xubuntu similar to the screenshot below



## Task 4: Install OpenStack

Once your Xubuntu server has network access and CRD - you are ready to install OpenStack

1. Install MicroStack from the beta channel:

Unset

```
sudo snap install microstack --devmode --beta
```

2. When the installation process has finished you should see something like the following message on the terminal:

Unset

```
microstack (beta) ussuri from Canonical✓ installed
```

3. MicroStack needs to be initialised, so that networks and databases get configured. To do this, run:

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```
sudo microstack init --auto --control
```

4. Once this completes (15 - 20 minutes) your OpenStack cloud will be up and running!

## Task 5: Accessing OpenStack

To interact with your cloud via the web UI visit `http://10.20.20.1/`.

1. The password for the `admin` user can be obtained with

Unset

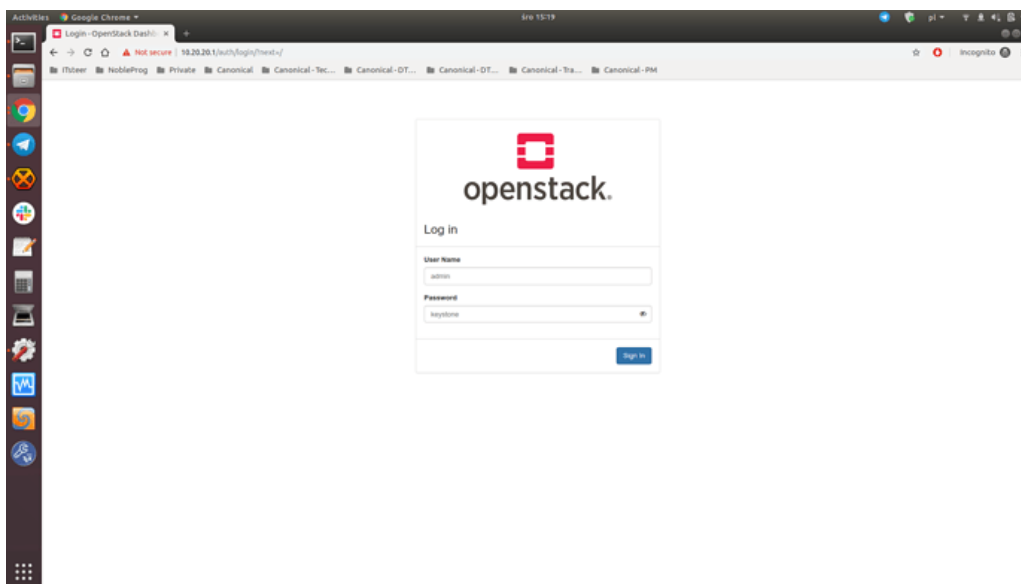
```
sudo snap get microstack config.credentials.keystone-password
```

2. Sample output:

Unset

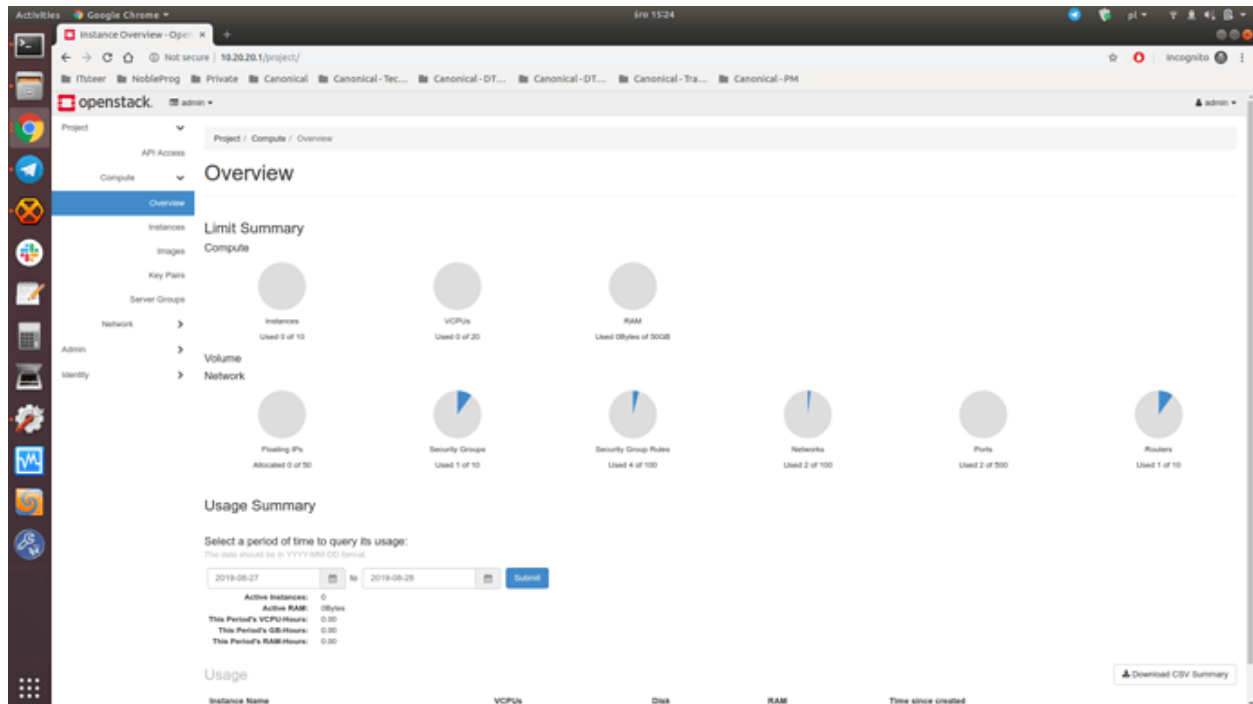
```
0AEHxLgCbz7Wz4usvo1AA61TrDUz6zz
```

3. Open <https://10.20.20.1> in the xubuntu browser. Login with “admin” and the password



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4. You should see a landing page like:



5. Browse to Compute-Images and you should see that an image of the CirrOS OS was added during the build. CirrOS is a very lightweight Linux distro that we can use for testing
6. Launch your first OpenStack instance (VM) called "test" based on that CirrOS image,

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```
microstack launch cirros --name test
```

7. The resulting output should provide the information you need to SSH to the instance:

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```
Access it with `ssh -i  
/home/ubuntu/snap/microstack/common/.ssh/id_microstack  
cirros@10.20.20.123`
```

8. Note that the IP address of the instance is likely different. Connect to the instance from your xubuntu terminal. **NOTE: If needed, the default cirros password is "gocubsgo"**

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Unset

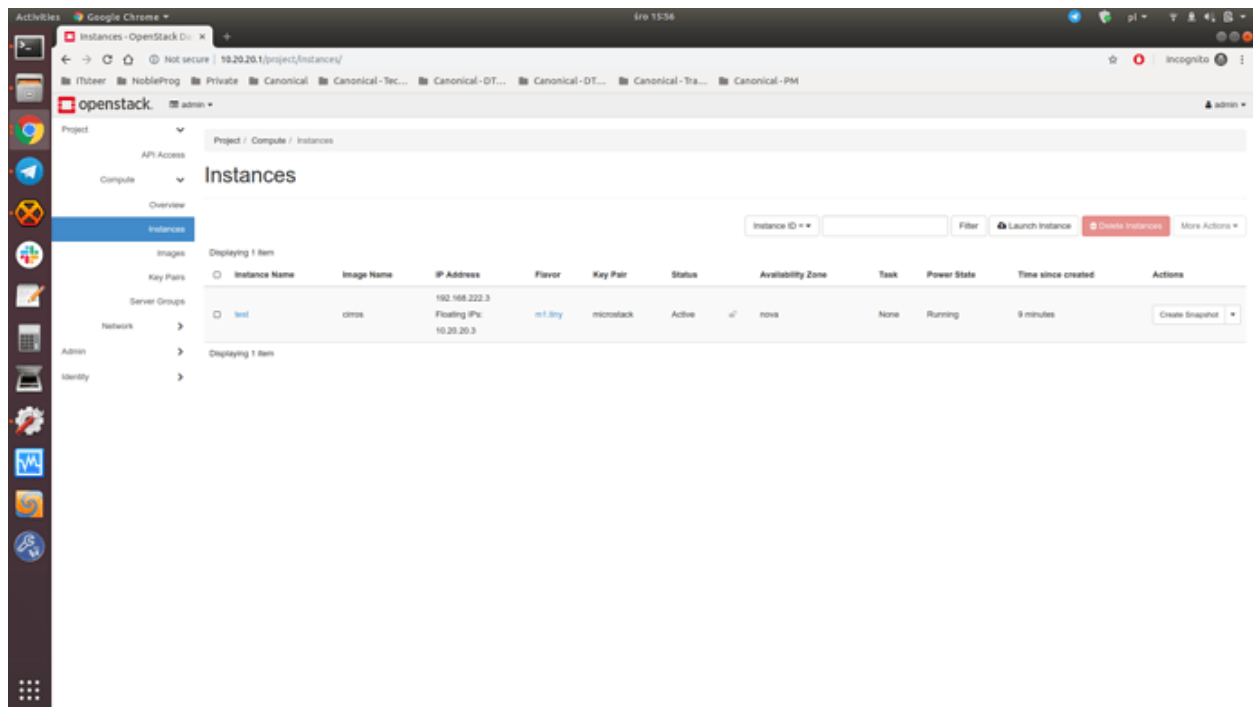
```
ssh -i /home/ubuntu/snap/microstack/common/.ssh/id_microstack  
cirros@10.20.20.123
```

9. Now that you are connected to the instance you can use normal Linux commands. Note that the CirrOS image provides a minimalist operating system! For example:

Unset

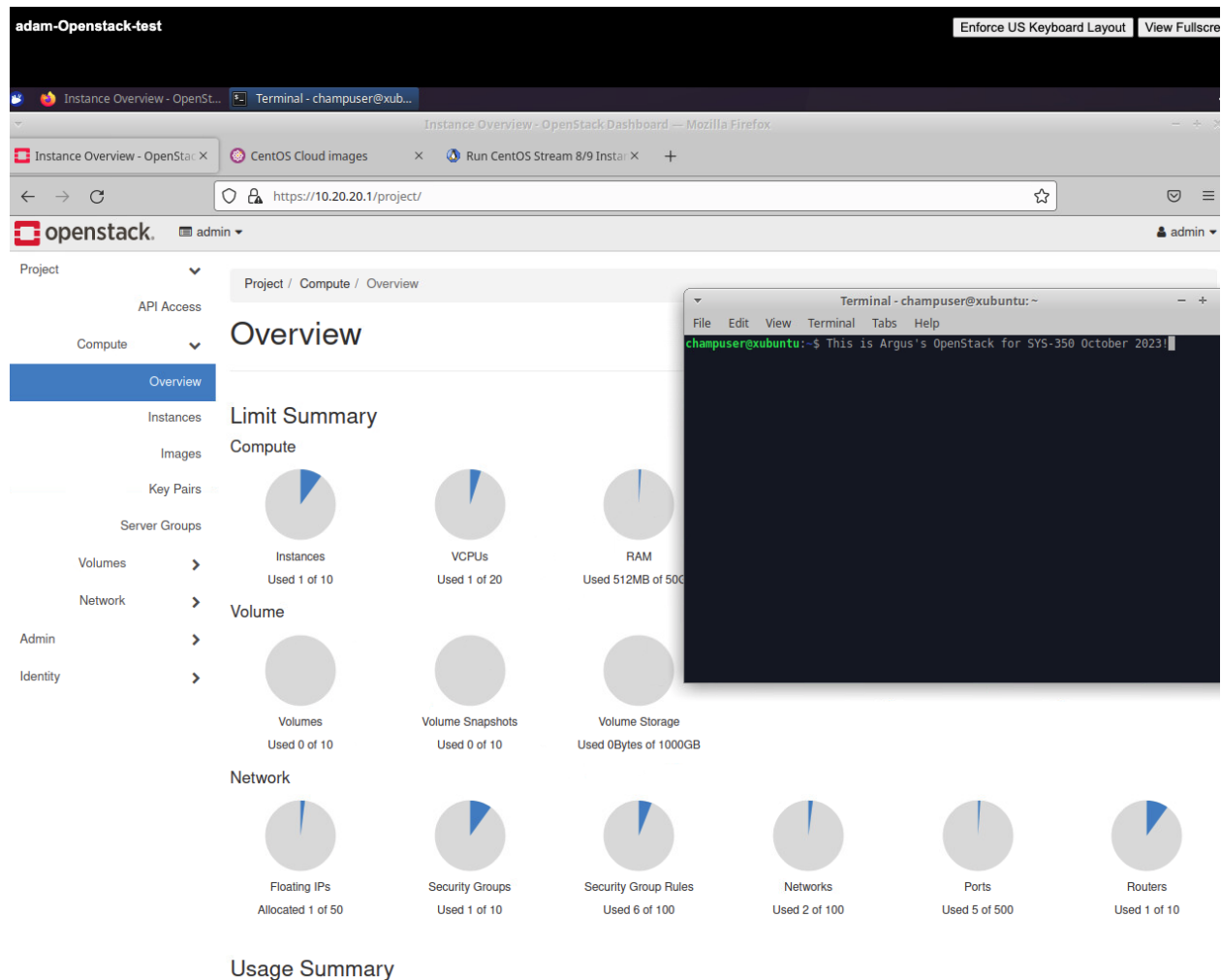
```
$ uptime  
14:51:42 up 4 min,  1 users,  load average: 0.00, 0.00, 0.00
```

10. You can also view the instance from the web UI. Go to <http://10.20.20.1/> and click on the “Instances” tab on the left:



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Deliverable 2. Provide screenshots that shows your running OpenStack Dashboard similar to the one below that includes your running instance **and has identifying information about your group!**



Deliverable 3. Tech Journal - Basic Documentation

Make sure to clearly document your Basic OpenStack Server Network Information and the commands that you used to install OpenStack.

Reference Tutorial: <https://discourse.ubuntu.com/t/get-started-with-microstack/13998>

Another Helpful Tutorial:

<https://dev.to/donaldsebleung/introduction-to-openstack-with-microstack-1f5j>