


CloudLab

Secure | https://www.cloudlab.us/user-dashboard.php#profiles



Experiments ▾ Storage ▾

Docs

ishah30 ▾

New standard images with Meltdown/Spectre mitigations have been deployed. See [the announcement](#) for details.

Experiments Profiles Project Profiles Datasets Membership Usage Account

You have not created any experiment profiles. You can either [instantiate](#) an experiment with an existing profile or [create a new profile](#).

Classic Emulab Experiments

↕ Name	↕ Project	↕ Description	↕ Created
[1] PHours : Number of nodes times number of hours in use.			

← → ↻ Secure | https://www.cloudlab.us/instantiate.php#

Experiments - Storage - Docs isiah30 -

New standard images with Meltdown/Spectre mitigations have been deployed. See the announcement for details.

1. Select a Profile 2. Parameterize 3. Finalize

Selected Profile: OpenStack (Reprohash: ff10c2e7)

This profile provides a highly-configurable OpenStack instance with a controller and one or more compute nodes (potentially at multiple Cloudlab sites) (and optionally a network manager node, in a split configuration). This profile runs x86 or ARM64 nodes. It sets up OpenStack Pike, Ocata, Newton, or Mitaka on Ubuntu 16.04 (Liberty on 15.10, Kilo on 15.04, and Juno on 14.10 are deprecated) according to your choice, and configures all OpenStack services, pulls in some VM disk images, and creates basic networks accessible via floating IPs. You'll be able to create instances and access them over the internet in just a few minutes. When you click the **Instantiate** button, you'll be presented with a list of parameters that you can change to control what your OpenStack instance will look like. **carefully** read the parameter documentation on that page (or in the instructions) to understand the various features available to you.

Show Profile Change Profile

Previous Next

https://www.cloudlab.us/instantiate.php#stepsContainer=3-0 Question or comment? Join the Help Forum Supported by NSF © 2018 The University of Utah

Type here to search

← → ↻ Secure | https://www.cloudlab.us/instantiate.php#

Experiments - Storage - Docs isiah30 -

New standard images with Meltdown/Spectre mitigations have been deployed. See the announcement for details.

1. Select a Profile 2. Parameterize 3. Finalize

This profile is parameterized; please make your selections below, and then click to continue.

Show All Parameter Help

OpenStack Release

Number of compute nodes (at Site 1)

Hardware Type

Experiment Link Speed

ML2 Plugin

Extra VM Image URIs

Experiment Firewall ☐

Advanced Parameters

Previous Next

https://www.cloudlab.us/instantiate.php#stepsContainer=3-1 Question or comment? Join the Help Forum Supported by NSF © 2018 The University of Utah

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Secure | <https://www.doudlab.us/instantiate.php#>

Experiments - Storage - Docs Ishah30 -

New standard images with Mitdown/Spectra mitigations have been deployed. See the announcement for details.

1. Select a Profile

2. Parameterize

3. Finalize

Profile: OpenStack Version: 0 [Source](#)

Please review the selections below and then click Finish.

Name:

Cluster:

[Advanced Options](#) [Check Resource Availability](#)

[Previous](#) [Finish](#)

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Experiments - Storage - Docs Ishah30 -

New standard images with Mitdown/Spectra mitigations have been deployed. See the announcement for details.

Please wait while we get your experiment ready

Name: Ishah30-QV35384

State: provisioning

Profile: OpenStack

RefSpec: refs/heads/master (f10c2e7)

Created: Apr 7, 2018 7:07 PM

Expires: Apr 8, 2018 11:07 AM (in 15 hours)

[Cancel](#) [Terminate](#)

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Secure | <https://www.cloudlab.us/status.php?uuid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4>

Experiments Storage Docs islah30


New standard images with Meltdown/Spectre mitigations have been deployed. See the announcement for details.

Your experiment is ready!

Name: islah30-QV35384
State: booted (startup services are still running)
Profile: OpenStack
RefSpec: refs/heads/master (ff10c2e7)
Created: Apr 7, 2018 7:07 PM
Expires: Apr 8, 2018 11:07 AM (in 15 hours)
Logs Extend Terminate

Profile Instructions

Topology View List View Manifest Graphs



Windows taskbar: Type here to search, 8:13 PM 4/7/2018

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Secure | <https://www.cloudlab.us/status.php?uuid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4>

Experiments Storage Docs islah30


New standard images with Meltdown/Spectre mitigations have been deployed. See the announcement for details.

Your experiment is ready!

Name: islah30-QV35384
State: ready
Profile: OpenStack
RefSpec: refs/heads/master (ff10c2e7)
Created: Apr 7, 2018 7:07 PM
Expires: Apr 8, 2018 11:07 AM (in 14 hours)
Logs Extend Terminate

Profile Instructions

Topology View List View Manifest Graphs



Windows taskbar: Type here to search, 8:42 PM 4/7/2018

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Secure | <https://www.cloudlab.us/status.php?uid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4>

Name: ishah30-QV35384

State: ready

Profile: OpenStack

RefSpec: refs/heads/master (#10c2e7)

Created: Apr 7, 2018 7:07 PM

Expires: Apr 8, 2018 11:07 AM (in 14 hours)

Logs

Extend Terminate

Profile Instructions

Topology View List View Manifest Graphs cp-1 x

```

Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-116-generic x86_64)

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

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*-copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ishah30@cp-1:~$
  
```

https://www.cloudlab.us/status.php?uid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4#cp-1_1_tab Question or comment? Join the Help Forum

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Secure | <https://www.cloudlab.us/status.php?uid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4>

(For nodes in one cloud, if you require more, you should create and share the nodes with the hostname to change. (default value: cp)

- Firewall Style**
Optionally add a CloudLab infrastructure firewall between the public IP addresses of your nodes (and your floating IPs) and the Internet (and rest of CloudLab). The choice you make for this parameter controls the firewall ruleset. If not None, None means no firewall; Basic implies a simple firewall that allows inbound SSH and outbound HTTP/HTTPS traffic; Closed implies a firewall ruleset that allows no communication with the outside world or other experiments within CloudLab. If you are unsure, the Basic style is the one that will work best for you. (default value: none)
- Controller Node Disk Image**
An image URN or URL that the controller node will run. (default value: **)
- Compute Node Disk Image**
An image URN or URL that the compute node will run. (default value: **)
- Network Manager Node Disk Image**
An image URN or URL that the network manager node will run. (default value: **)

Topology View List View Manifest Graphs cp-1 x

```

graph LR
    A[ ] --- B[cp-1]
    A --- C[cs]
  
```

Click on a node for more options. Click and drag to move things around.

Reload Topo Run Linktest Refresh Status

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- Name of controller node**
The short name of the controller node. You should leave this alone unless you really want the hostname to change. (default value: ctl)
- Name of network manager node**
The short name of the network manager (neutron) node. If you specify the same name here as you did for the controller, then your controller and network manager will be unified into a single node. You should leave this alone unless you really want the hostname to change. (default value: ctl)
- Base name of compute node(s)**
The base string of the short name of the compute nodes (node names will look like cp-1, cp-2, ... or cp-s2-1, cp-s2-2, ... (for nodes at Site 2, if you request those)). You should leave this alone unless you really want the hostname to change. (default value: cp)
- Firewall Style**
Optionally add a CloudLab infrastructure firewall between the public IP addresses of your nodes (and your floating IPs) and the internet (and rest of CloudLab). The choice you make for this parameter controls the firewall ruleset. If not None, None means no firewall. Basic implies a simple firewall that allows inbound SSH and outbound HTTP/HTTPS traffic; Closed implies a firewall ruleset that allows no communication with the outside world or other experiments within CloudLab. If you are unsure, the Basic style is the one that will work best for you. (default value: none)
- Controller Node Disk Image**
An image URN or URL that the controller node will run. (default value: **)
- Compute Node Disk Image**
An image URN or URL that the compute node will run. (default value: **)
- Network Manager Node Disk Image**
An image URN or URL that the network manager node will run. (default value: **)

ID	Node	Type	SSH command (if you provided your own key)	Actions
ctl	apt046	c6220	ssh -p 22 ishah30@apt046.apt.emulab.net	
cp-1	apt060	c6220	ssh -p 22 ishah30@apt060.apt.emulab.net	

Your experiment is ready!

Name: ishah30-QV35384
State: ready
Profile: OpenStack
RefSpec: refs/heads/master (#f10c2e7)
Created: Apr 7, 2018 7:07 PM
Expires: Apr 8, 2018 11:07 AM (in 14 hours)

[Login](#) [Extend](#) [Terminate](#)

[Profile Instructions](#)

```

Topology View List View Manifest Graphs cp-1 X
<rspec xmlns="http://www.geni.net/resources/rspec/3" xmlns:emulab="http://www.protogeni.net/resources/rspec/ext/emulab/1" xmlns:tour="http://www.protogeni.net/resources/rspec/
<node xmlns:jacks="http://www.protogeni.net/resources/rspec/ext/jacks/1" xmlns:emulab="http://www.protogeni.net/resources/rspec/ext/emulab/1" client_id="ctl" exclusive="true"
<sliver_type name="raw-pc">
  <disk_image name="urn:publicid:IDN+utah.cloudlab.us+image+emulab-ops//UBUNTU16-64-OSCN-P"/>
</sliver_type>
<interface client_id="ctl:if0" component_id="urn:publicid:IDN+apt.emulab.net+interface+apt046:eth2" sliver_id="urn:publicid:IDN+apt.emulab.net+sliver+147624" mac_address="e
<ip address="10.11.10.1" netmask="255.255.0.0" type="ipv4"/>
</interface>
<services>
  <login authentication="ssh-keys" hostname="apt046.apt.emulab.net" port="22" username="ishah30"/>
  <emulab:console server="boss.apt.emulab.net"/>
  <execute shell="/bin/sh" command="cd /local & & sudo chmod 777 . & & umask 002 & & git clone -n 'https://gitlab.flux.utah.edu/johnson/openstack-buil
  <execute shell="sh" command="sudo mkdir -p /root/setup & & (if [ -d /local/repository ]; then sudo -H /local/repository/setup-driver.sh 2& & i | sudo tee /roc
  <install url="http://www.emulab.net/downloads/openstack-setup-v33.tar.gz" install_path="/tmp"/>
</services>
<emulab:rootkey private="false" public="false"/>

```

The screenshot shows a web browser with the URL `https://www.cloudlab.us/status.php?uuid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4`. The page displays the status of a CloudLab instance:

- Name: isah30-QV35384
- State: **ready**
- Profile: OpenStack
- RefSpec: refs/heads/master (#10c2e7)
- Created: Apr 7, 2018 7:07 PM
- Expires: Apr 8, 2018 11:07 AM (in 14 hours)

Buttons for **Log**, **Extend**, and **Terminate** are visible. Below the instance details is a section for **Profile Instructions**.

Below the browser window, a terminal window is open, showing the output of a `ssh` command:

```
No directory, logging in with HOME=/
Trying 127.0.0.1...
Connected to localhost.
Escape character is 'off'.
```

A context menu is open over the terminal, listing actions: Shell, Console, Console Log, Reboot, Reload, and Delete Node.

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Secure | https://www.cloudlab.us/status.php?uuid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4
new standard images with Mentoorn/spectre mitigations have been deployed: see the announcement for details.

Your experiment is ready!

Name: ishah30-QV35384
State: ready
Profile: OpenStack
RefSpec: refs/heads/master (#10c2e7)
Created: Apr 7, 2018 7:07 PM
Expires: Apr 8, 2018 11:07 AM (in 14 hours)
Logs Extend Terminate

Profile Instructions

Basic Instructions

Once your experiment nodes have booted, and this profile's configuration scripts have finished configuring OpenStack inside your experiment, you'll be able to visit the [OpenStack Dashboard WWW interface](#) (approx. 5-15 minutes). If you've selected the Pike release (or newer), you can also login to your experiment's [Grafana WWW interface](#) and view OpenStack instance VM statistics once you've created some VMs. Your OpenStack admin and instance VM password is randomly-generated by Cloudlab, and it is [c3b2e3e7d3b2](#). When logging in to the Dashboard, use the [admin](#) user; when logging into instance VMs, use the [ubuntu](#) user. If you have selected Mitaka or newer, use 'default' as the Domain at the login prompt.

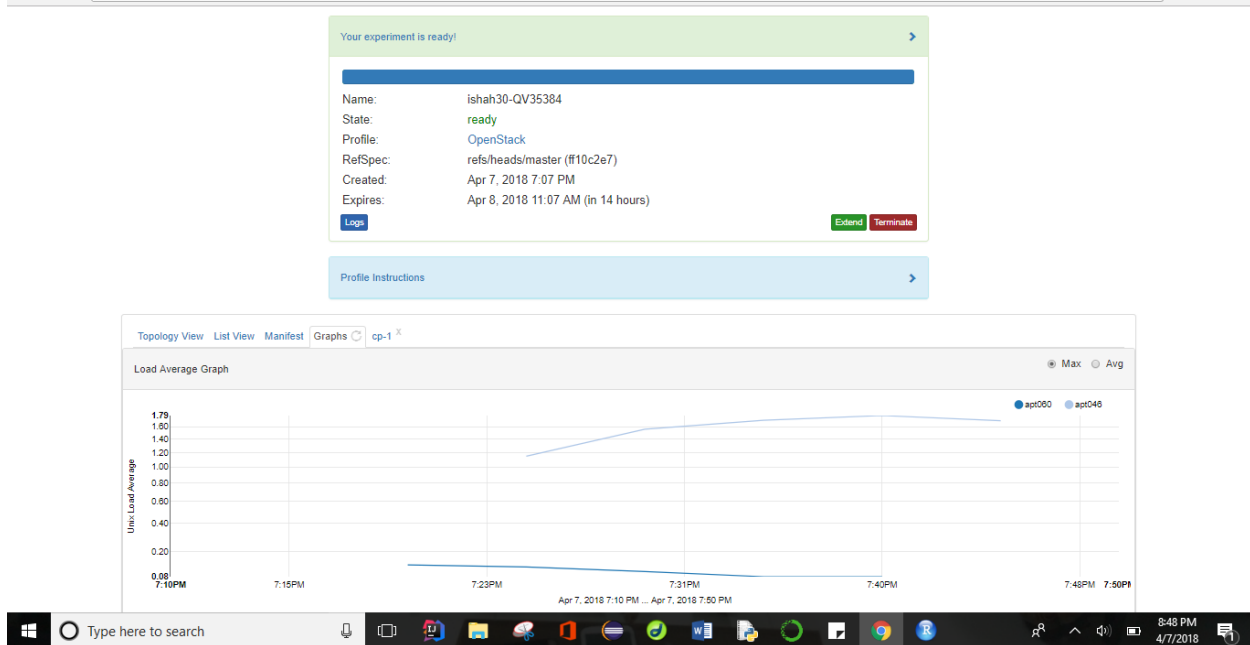
Please wait to login to the OpenStack dashboard until the setup scripts have completed. There are no board issues with if the scripts have finished.

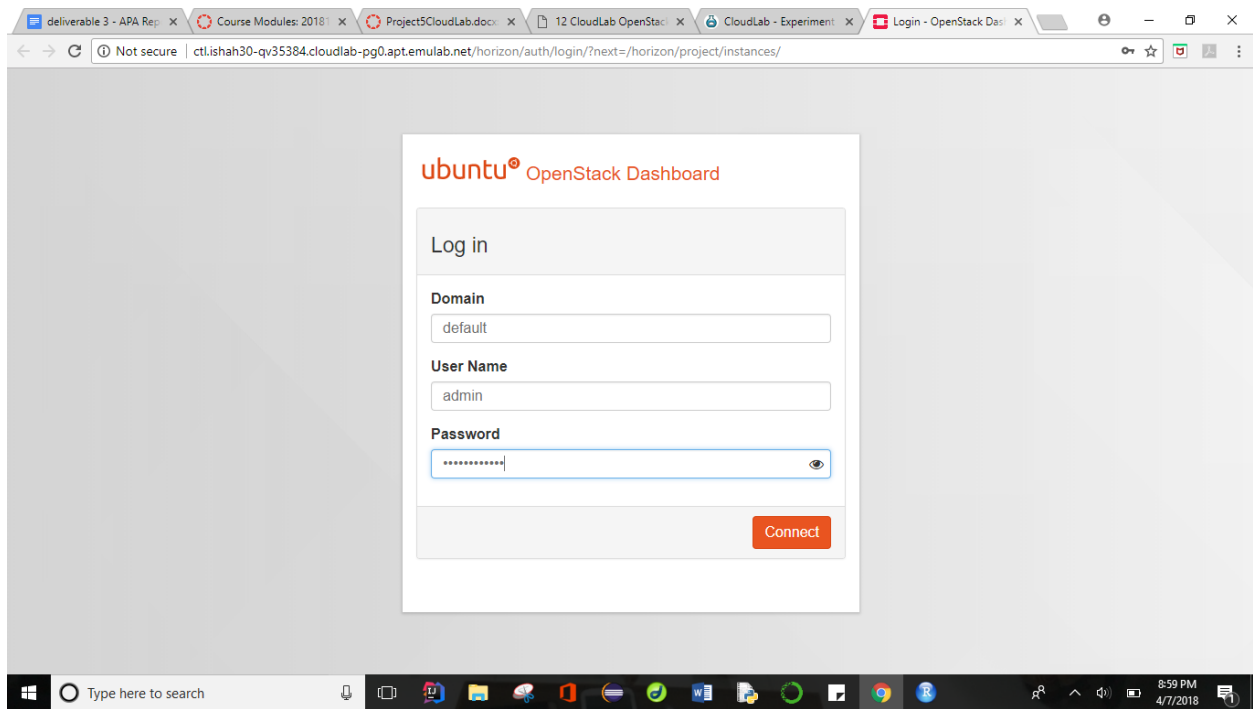
- First, you can watch the experiment status page: the overall State will say "ready".
- Second, the Topology View will show you, for each node, the status of the command kicks off the setup scripts on each node. Once the startup command State field will change to "ready". If any of the startup scripts fail, you can view for the status code.
- Finally, the profile configuration scripts also send you two emails: once to notify you that controller setup has started, and a second to notify you that setup has completed. Once you receive the second email, you can login to the OpenStack dashboard.

Shell
Console
Console Log
Reboot
Reload
Delete Node

Type here to search

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Secure | https://www.cloudlab.us/status.php?uuid=cc3aad90-3ac0-11e8-b225-90e2ba22fee4





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cti.ishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/project/instances/

ubuntu® default • admin admin

Project

- API Access
- Compute
- Overview
- Instances**
- Images
- Key Pairs
- Volumes
- Network
- Orchestration
- Database
- Data Processing
- Object Store
- Other

Admin

Instances

Instance ID = Filter [Launch Instance](#)

Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Time since created	Actions
No items to display.										

Type here to search

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cti.ishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/project/instances/

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Project

- API Access
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Launch Instance

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.

Details

Source *

Flavor *

Instance Name *

Availability Zone

Count *

Total Instances (No Limit)
0 Current Usage
1 Added

Networks *

Network Ports

Security Groups

Key Pair

Configuration

Server Groups

Scheduler Hints

Metadata

Type here to search

Launch Instance

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.

Select Boot Source

Image

Create New Volume

Allocated

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

Available

Name	Updated	Size	Type	Visibility
> manila-service-image	4/7/18 7:39 PM	372.69 MB	qcow2	Private
> trusty-server	4/7/18 7:39 PM	252.56 MB	qcow2	Private

Launch Instance

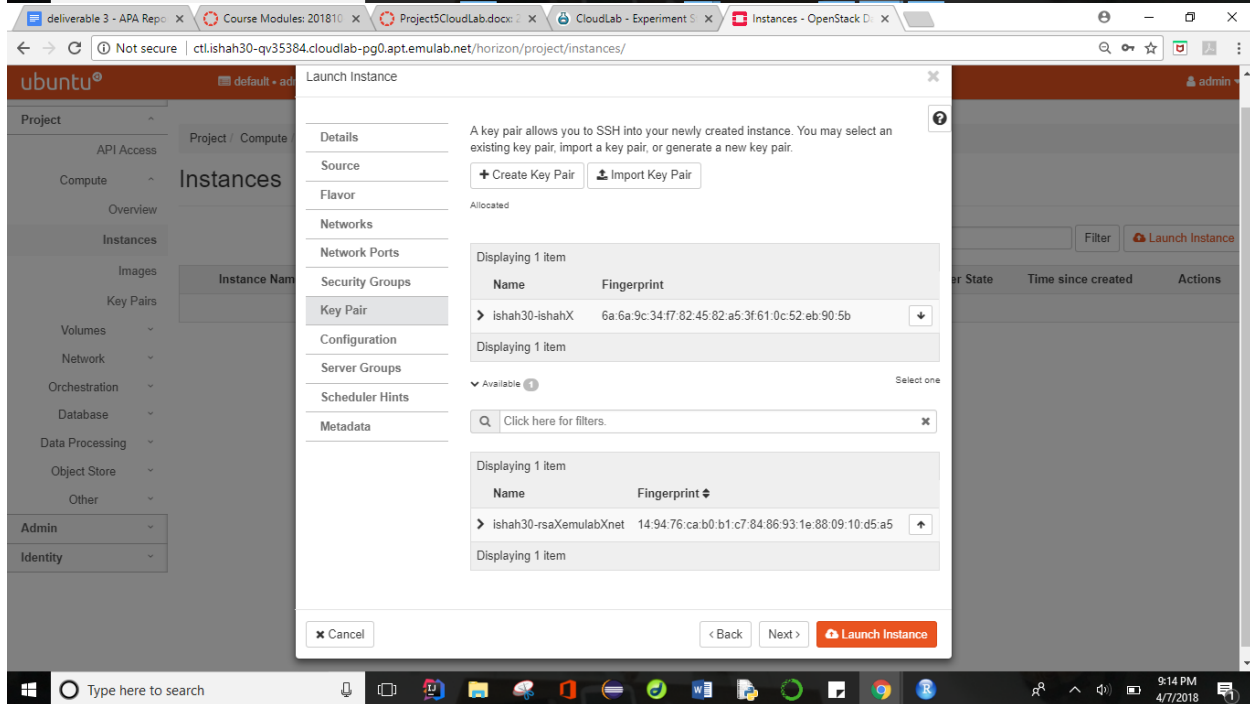
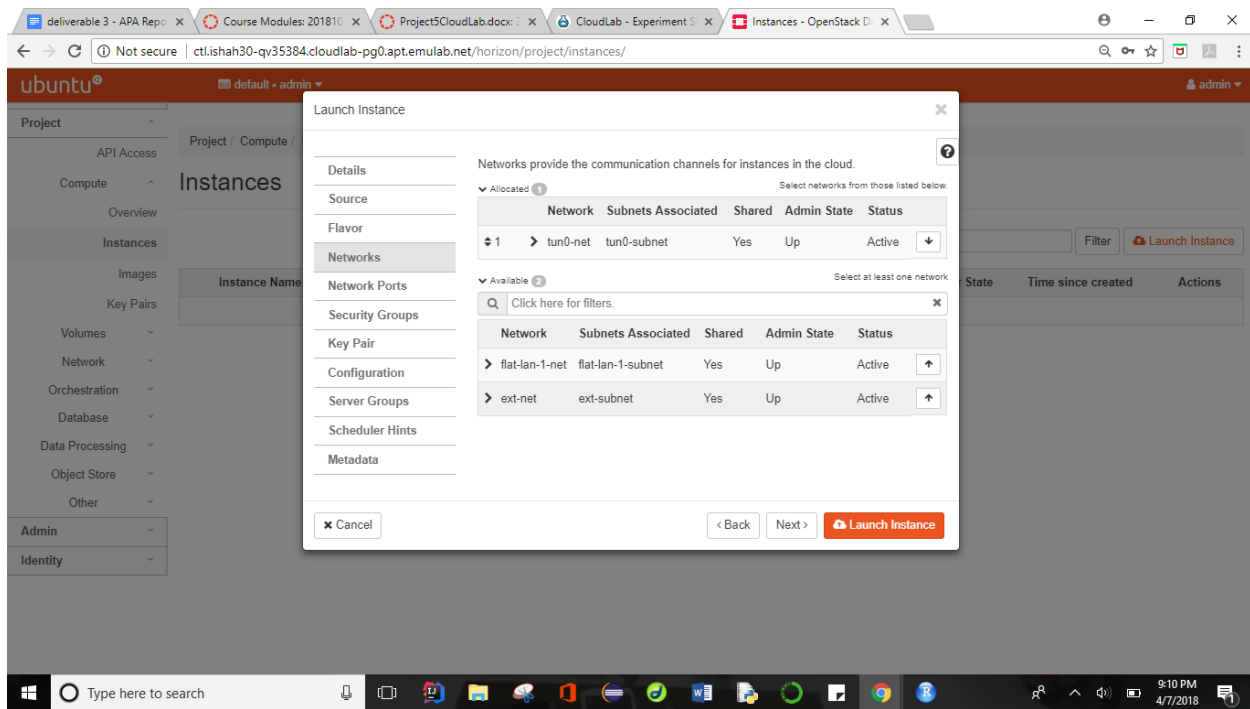
Flavors manage the sizing for the compute, memory and storage capacity of the Instance.

Allocated

Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk	Public
> m1.small	1	2 GB	20 GB	20 GB	0 GB	Yes

Available

Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk	Public
> m1.tiny	1	512 MB	1 GB	1 GB	0 GB	Yes
> manila-service-flavor	1	256 MB	0 GB	0 GB	0 GB	Yes
> m1.medium	2	4 GB	40 GB	40 GB	0 GB	Yes
> m1.large	4	8 GB	80 GB	80 GB	0 GB	Yes
> m1.xlarge	8	16 GB	160 GB	160 GB	0 GB	Yes



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Project / Compute / Instances

Instances

Instance ID = FilterLaunch InstanceDelete InstancesMore Actions

Displaying 1 item

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Time since created	Actions
<input type="checkbox"/>	IshitaShah	trusty-server	10.254.0.7	m1.small	ishah30-ishahX	Build	nova	Spawning	No State	0 minutes	Associate Floating IP

Displaying 1 item

Type here to search

9:16 PM4/7/2018

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Instances

Instance ID = Filter Launch Instance Delete Instances More Actions

Displaying 1 item

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Time since created	Actions
<input type="checkbox"/>	IshitaShah	trusty-server	10.254.0.7	m1.small	ishah30-ishahX	Build	nova	Spawning	No State	0 minutes	Associate Floating IP

Displaying 1 item

Windows 10 Taskbar: Type here to search, 9:16 PM 4/7/2018

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active 1/1

Launch Instance Delete Instances More Actions

Power State Time since created Actions

Running 0 minutes Create Snapshot

Manage Floating IP Associations

IP Address *
No floating IP addresses allocated + Select the IP address you wish to associate with the selected instance or port.

Port to be associated *
IshitaShah: 10.254.0.7

Cancel Associate

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ctlishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/project/instances/

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Project Compute Instances

Instances

Displaying 1 item

<input type="checkbox"/>	Instance Name	Image
<input type="checkbox"/>	IshitaShah	trusty-s

Displaying 1 item

Manage Floating IP Associations

IP Address *
128.110.99.130

Port to be associated *
IshitaShah: 10.254.0.7

Select the IP address you wish to associate with the selected instance or port.

Cancel Associate

Success: Allocated Floating IP 128.110.99.130.

Launch Instance Delete Instances More Actions

Power State	Time since created	Actions
Running	0 minutes	Create Snapshot

Type here to search

9:18 PM 4/7/2018

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ctlishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/project/instances/?action=row_update&table=instances&obj_id=9c7edb63-e92a-4798-b248-c36bada95a3f

ubuntu® default - admin admin

Project / Compute / Instances

Instances

Instance ID = Filter [Launch Instance](#) [Delete Instances](#) [More Actions](#)

Displaying 1 item

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Time since created	Actions
<input type="checkbox"/>	IshitaShah	trusty-server	10.254.0.7 Floating IP: 128.110.99.130	m1.small	ishah30-ishahX	Active	nova	None	Running	2 minutes	Create Snapshot

Displaying 1 item

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Project / Compute / Instances

Instances

Instance ID =

Displaying 1 item

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor	Key Pair
<input type="checkbox"/>	IshitaShah	trusty-server	10.254.0.7 Floating IP: 128.110.99.130	m1.small	ishah30-ishahX

Displaying 1 item

Project / Compute / Instances

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128.110.99.130 - PuTTY

```
Graph this data and manage this system at:
https://landscape.canonical.com/

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ubuntu@ishitashah:~$
```

Type here to search

10:05 AM 4/8/2018


```
128.110.99.130 - PuTTY

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ubuntu@shitashah:~$ ps -ef
UID          PID    PPID    C  STIME TTY          TIME CMD
root         1      0   0  01:16 ?        00:00:01 /sbin/init
root         2      0   0  01:16 ?        00:00:00 [kthreadd]
root         3      2   0  01:16 ?        00:00:00 [ksoftirqd/0]
root         5      2   0  01:16 ?        00:00:00 [kworker/0:0H]
root         6      2   0  01:16 ?        00:00:00 [kworker/u2:0]
root         7      2   0  01:16 ?        00:00:01 [rcu_sched]
root         8      2   0  01:16 ?        00:00:01 [rcuops/0]
root         9      2   0  01:16 ?        00:00:00 [rcu_bh]
root        10      2   0  01:16 ?        00:00:00 [rcuob/0]
root        11      2   0  01:16 ?        00:00:00 [migration/0]
root        12      2   0  01:16 ?        00:00:00 [watchdog/0]
root        13      2   0  01:16 ?        00:00:00 [khalper]
root        14      2   0  01:16 ?        00:00:00 [kdevtmpfs]
root        15      2   0  01:16 ?        00:00:00 [netns]
root        16      2   0  01:16 ?        00:00:00 [writeback]
root        17      2   0  01:16 ?        00:00:00 [kintegrityd]
root        18      2   0  01:16 ?        00:00:00 [blosset]
root        19      2   0  01:16 ?        00:00:00 [kworker/u3:0]
root        20      2   0  01:16 ?        00:00:00 [kblockd]
root        21      2   0  01:16 ?        00:00:00 [ata_sff]
root        22      2   0  01:16 ?        00:00:00 [khubd]
root        23      2   0  01:16 ?        00:00:00 [md]
root        24      2   0  01:16 ?        00:00:00 [devfreq_wq]
root        25      2   0  01:16 ?        00:00:00 [kworker/0:1]
root        27      2   0  01:16 ?        00:00:00 [khungtaskd]
root        28      2   0  01:16 ?        00:00:00 [kswapd0]
root        29      2   0  01:16 ?        00:00:00 [vmstat]
root        30      2   0  01:16 ?        00:00:00 [ksmd]
root        31      2   0  01:16 ?        00:00:00 [khugepaged]
root        32      2   0  01:16 ?        00:00:00 [fsnotify_mark]
root        33      2   0  01:16 ?        00:00:00 [ecryptfs-kthrea]
root        34      2   0  01:16 ?        00:00:00 [crypto]
root        46      2   0  01:16 ?        00:00:00 [kthrotld]
root        47      2   0  01:16 ?        00:00:00 [kworker/u2:1]
```

```
128.110.99.130 - PuTTY

root      1004      1   0  01:16 ?        00:00:00 upstart-file-bridge --daemon
syslogd   1018      1   0  01:16 ?        00:00:02 rsyslogd
root      1020      1   0  01:16 ?        00:00:00 /lib/systemd/systemd-logind
root     1112      1   0  01:16 tty4      00:00:00 /sbin/getty -8 38400 tty4
root     1115      1   0  01:16 tty5      00:00:00 /sbin/getty -8 38400 tty5
root     1119      1   0  01:16 tty2      00:00:00 /sbin/getty -8 38400 tty2
root     1120      1   0  01:16 tty3      00:00:00 /sbin/getty -8 38400 tty3
root     1122      1   0  01:16 tty6      00:00:00 /sbin/getty -8 38400 tty6
root     1155      1   0  01:16 ?        00:00:02 /usr/sbin/sshd -D
root     1161      1   0  01:16 ?        00:00:00 acpid -c /etc/acpi/events -s /va
root     1173      1   0  01:16 ?        00:00:00 cron
daemon    1174      1   0  01:16 ?        00:00:00 atd
root     1260      1   0  01:16 tty1      00:00:00 /sbin/getty -8 38400 tty1
root     1266      1   0  01:16 ttyS0     00:00:00 /sbin/getty -L ttyS0 115200 vt10
root     1354      2   0  01:17 ?        00:00:00 [kauditd]
root     14382    1155   0  14:04 ?        00:00:00 sshd: ubuntu [priv]
ubuntu   14494    14382   0  14:04 ?        00:00:00 sshd: ubuntu@pts/0
ubuntu   14495    14494   0  14:04 pts/0     00:00:00 -bash
root     14546    1155   0  14:07 ?        00:00:00 sshd: root [priv]
sshd     14547    14546   0  14:07 ?        00:00:00 sshd: root [net]
ubuntu   14548    14495   0  14:08 pts/0     00:00:00 ps -ef

ubuntu@shitashah:~$ root      24      2   0  01:16 ?        00:00:00 [devfreq_wq]
The program 'root' is currently not installed. To run 'root' please ask your administrator to install the package 'root-system-bin'
ubuntu@shitashah:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr fa:16:3e:e6:f4:df
          inet addr:10.254.0.7  Bcast:10.254.255.255  Mask:255.255.0.0
          inet6 addr: fe80::f816:3eff:fee6:f4df/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1450  Metric:1
          RX packets:136488 errors:0 dropped:0 overruns:0 frame:0
          TX packets:151261 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:30470731 (30.4 MB)  TX bytes:29001894 (29.0 MB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

ubuntu@shitashah:~$
```

Optionally add a CloudLab infrastructure firewall between the public IP addresses of your nodes (and your floating IPs) and the Internet (and rest of CloudLab). The choice you make for this parameter controls the firewall ruleset, if not None. None means no firewall. Basic implies a simple firewall that allows inbound SSH and outbound HTTP/HTTPS traffic; Closed implies a firewall ruleset that allows no communication with the outside world or other experiments within CloudLab. If you are unsure, the Basic style is the one that will work best for you. (default value: none)

- **Controller Node Disk Image**
An image URN or URL that the controller node will run. (default value: "")
- **Compute Node Disk Image**
An image URN or URL that the compute node will run. (default value: "")
- **Network Manager Node Disk Image**
An image URN or URL that the network manager node will run. (default value: "")

Topology View List View Manifest Graphs cp-1 x

```
Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-116-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage
Last login: Sat Apr  7 18:42:58 2018 from 159.98.33.74
ishah30@cp-1:~$ sudo virsh list --all
error: unexpected data '-all'
ishah30@cp-1:~$ sudo virsh list --all
 Id Name                               State
-----
  1 instance-00000001                 running
ishah30@cp-1:~$
```

Shell
Console
Console Log
Reboot
Reload
Delete Node

Your experiment is ready

Name: ishah30-QV35384
State: ready
Profile: OpenStack
RefSpec: refs/heads/master (f10c2e7)
Created: Apr 7, 2018 7:07 PM
Expires: Apr 12, 2018 11:07 AM (in 4 days)

Logs Extend Terminate

Profile Instructions

Topology View List View Manifest Graphs cp-1 x cp-1-Cons x

Password

```
No directory, logging in with HOME=/
Trying 127.0.0.1...
Connected to localhost.
Escape character is 'off'.
```

deliverable 3 - APA Rep... CloudLab - Experiment 5 Hypervisors - OpenStack

ctlishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/admin/hypervisors/

ubuntu® default • admin

Project Admin

Overview Compute Hypervisors Host Aggregates Instances Flavors Images Volume Network System Other Identity

Admin / Compute / All Hypervisors

All Hypervisors

Hypervisor Summary

VCPU Usage
Used 1 of 32

Memory Usage
Used 2.5GB of 62.6GB

Local Disk Usage
Used 20GB of 895GB

Hypervisor Compute Host

Displaying 1 item

Hostname	Type	VCPUs (used)	VCPUs (total)	RAM (used)	RAM (total)	Local Storage (used)	Local Storage (total)	Instances
cp-1.ishah30-qv35384.cloudlab-pg0.apt.emulab.net	QEMU	1	32	2.5GB	62.6GB	20GB	895GB	1

Displaying 1 item

CloudLab - Experiment 5 Hypervisors - OpenStack Project5CloudLab.docx

ctlishah30-qv35384.cloudlab-pg0.apt.emulab.net/horizon/admin/hypervisors/

ubuntu® default • admin

Project Admin

Overview Compute Hypervisors Host Aggregates Instances Flavors Images Volume Network System Other Identity

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Hypervisor Compute Host

Filter

Displaying 1 item

Host	Availability zone	Status	State	Time since update	Actions
cp-1.ishah30-qv35384.cloudlab-pg0.apt.emulab.net	nova	Enabled	Up	0 minutes	Disable Service

Displaying 1 item

Type here to search

10:33 AM 4/8/2018