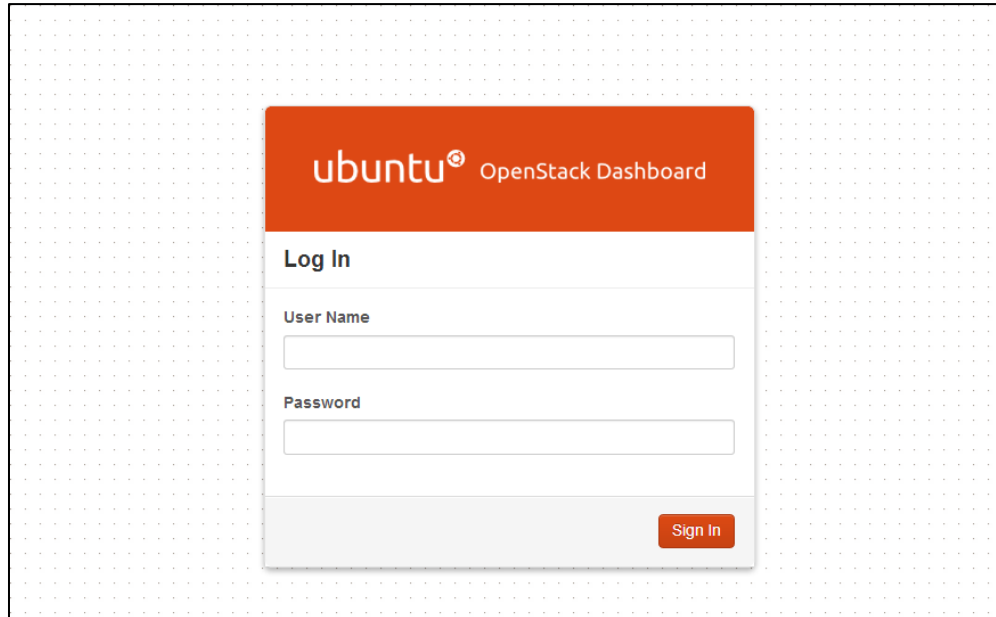


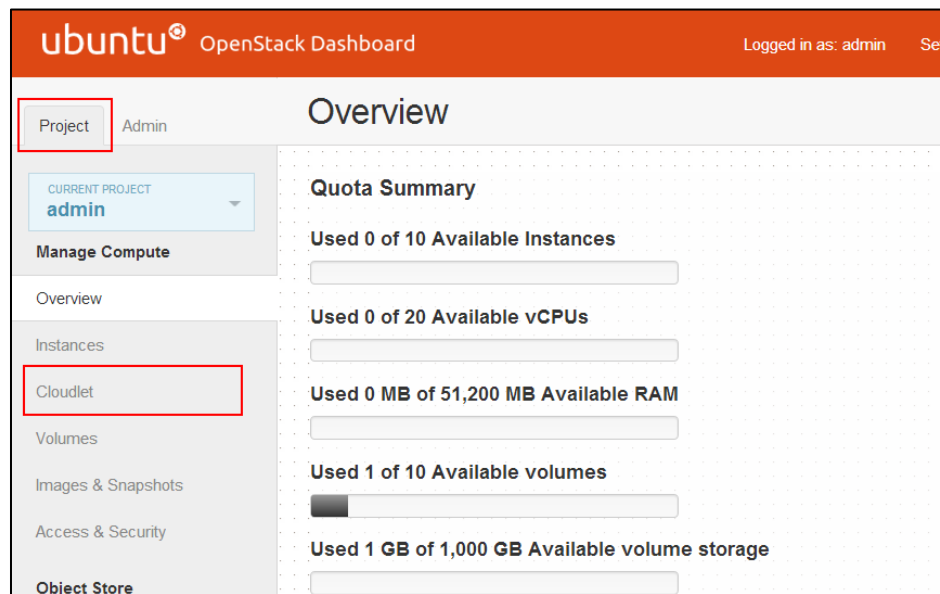
This documentation illustrates how to use cloudlet features at OpenStack

1. Open browser (Chrome or Firefox is preferred.)
2. Connect to <http://hail.elijah.cs.cmu.edu/>
3. Login in (id: elijah-cloudlet1)



The screenshot shows the Ubuntu OpenStack Dashboard login interface. It features a red header with the 'ubuntu' logo and 'OpenStack Dashboard' text. Below the header is a 'Log In' section with two input fields: 'User Name' and 'Password'. A red 'Sign In' button is located at the bottom right of the login form.

4. Go to project → Cloudlet menu



The screenshot shows the Ubuntu OpenStack Dashboard Overview page. The top header is red with the 'ubuntu' logo and 'OpenStack Dashboard' text. On the right side of the header, it says 'Logged in as: admin'. The main content area is divided into a left sidebar and a main panel. The sidebar has a 'Project' tab selected, showing 'CURRENT PROJECT admin' and a 'Manage Compute' button. Below this are links for 'Overview', 'Instances', 'Cloudlet' (highlighted with a red box), 'Volumes', 'Images & Snapshots', 'Access & Security', and 'Object Store'. The main panel is titled 'Overview' and contains a 'Quota Summary' section with five rows of usage information and progress bars:

Resource	Used	Available
Instances	0	10
vCPUs	0	20
RAM	0 MB	51,200 MB
volumes	1	10
volume storage	1 GB	1,000 GB

5. There are 3 tables; 1) List of *base VMs* 2) List of *VM overlays* 3) List of running VMs

The screenshot shows the OpenStack Dashboard interface. On the left is a sidebar with navigation links. The main content area displays three tables. The first table, 'Base VM Images', is highlighted with a red box and contains one row for 'ubuntu12-disk'. The second table, 'VM Overlays', is also highlighted with a red box and contains two rows for different overlay IDs. The third table, 'Instances', is not highlighted and shows 'No items to display'.

Base VM Images	Status	Public	Actions
ubuntu12-disk	Active	Yes	Resume Base VM More ▾

VM Overlays	Status	Public	Actions
overlay-2e88bfd8-0f82-400a-8c62-cfa94db13cb9	Active	Yes	Download VM overlay More ▾
overlay-a7879b83-8746-4c81-a4f6-974644b15512	Active	Yes	Download VM overlay More ▾

Instance Name	Type	IP Address	Size	Status	Task	Power State	Actions
No items to display.							

6. To create your own VM overlay, click “Resume Base VM”. It will create new VM instance which is a resumed base VM.

This screenshot is similar to the previous one but highlights specific actions. A red box around the 'Resume Base VM' button in the 'Base VM Images' table indicates the step to create a new VM instance. Another red box around the 'Start VM Synthesis' button in the 'Instances' table indicates the next step.

Base VM Images	Status	Public	Actions
ubuntu12-disk	Active	Yes	Resume Base VM More ▾

VM Overlays	Status	Public	Actions
overlay-2e88bfd8-0f82-400a-8c62-cfa94db13cb9	Active	Yes	Download VM overlay More ▾
overlay-a7879b83-8746-4c81-a4f6-974644b15512	Active	Yes	Download VM overlay More ▾

Instance Name	Type	IP Address	Size	Status	Task	Power State	Actions
No items to display.							

7. You can start customizing the VM by connecting the VM over VNC by clicking instance name → Console. After finishing customization, click “Create VM overlay” to start creating VM overlay.

ubuntu® OpenStack Dashboard

Logged in as: elijah-cloudlet1 Settings Help Sign Out

Cloudlet Info

Project Admin

CURRENT PROJECT elijah1

Manage Compute

Overview

Instances

Cloudlet

Volumes

Images & Snapshots

Access & Security

Object Store

Containers

Import Base VM Delete Images

Base VM Images	Status	Public	Actions
<input type="checkbox"/> ubuntu12-disk	Active	Yes	<button>Resume Base VM</button>

Displaying 1 item

VM Overlays	Status	Public	Actions
No items to display.			

Displaying 0 items

Start VM Synthesis

Instance Name	Type	IP Address	Size	Status	Task	Power State	Actions
<input type="checkbox"/> Resumed VM	Resumed Base VM	10.0.0.2 128.2.213.136	m1.tiny 512MB RAM 1 VCPU 0 Disk	Active	None	Running	<button>Create VM overlay</button>

- To perform VM synthesis, click “VM synthesis” button. It will ask you to input URL for the VM overlay.

Cloudlet Synthesize VM

VM overlay Info

URL for VM overlay

Instance Name

synthesized_vm

Security Groups

☒ default

Description

We resume the instance from the glance image server.

If you haven't used this base VM recently, it might take a few minutes to retrieve.

Project Quotas

Number of Instances (1) 9 Available

Number of VCPUs (1) 19 Available

Total RAM (512 MB) 50,688 MB Available

Cancel Synthesize