

**EX NO: 8     Virtual Machine Creation in OpenStack Cloud Platform (Online)**

**ROLL NUMBER: 19UITE047**

**Step 1: Switch to “root” user**

```
user@vmub-hadoop1:~$ sudo su -  
root@vmub-hadoop1:~# sudo apt-get update
```

**Step 2: Install “git” and logout from “root user”**

```
root@vmub-hadoop1:~# sudo apt-get install git  
root@vmub-hadoop1:~# exit  
logout  
user@vmub-hadoop1:~$
```

**Step 3: Create/Add a user “stack” with “no password”**

```
user@vmub-hadoop1:~$ sudo useradd -s /bin/bash -d /opt/stack -m stack  
user@vmub-hadoop1:~$ echo "stack ALL=(ALL) NOPASSWD: ALL" |  
sudo tee /etc/sudoers.d/stack  
stack ALL=(ALL) NOPASSWD: ALL
```

**Step 4: Move to “stack” user**

```
user@vmub-hadoop1:~$ sudo su - stack
```

**Step 5: Clone the “devstack” from the specified link**

```
stack@vmub-hadoop1:~$ git clone https://github.com/openstack-dev/devstack
```

```
Cloning into 'devstack'...  
remote: Enumerating objects: 49330, done.
```

```
remote: Counting objects: 100% (2556/2556), done.
remote: Compressing objects: 100% (836/836), done.
remote: Total 49330 (delta 1831), reused 2226 (delta 1709), pack-reused
46774
Receiving objects: 100% (49330/49330), 15.56 MiB | 2.33 MiB/s, done.
Resolving deltas: 100% (34462/34462), done.
Checking connectivity... done.
```

### **Step 6: Move to “/devstack/samples”**

```
stack@vmub-hadoop1:~$ cd devstack
stack@vmub-hadoop1:~/devstack$ ls
clean.sh      doc      functions   gate      lib      openrc     roles
stackrc      tools
CONTRIBUTING.rst  extras.d  functions-common  HACKING.rst
LICENSE       playbooks  run_tests.sh  stack.sh  tox.ini
data          files      FUTURE.rst    inc       Makefile  README.rst
samples      tests     unstack.sh
stack@vmub-hadoop1:~/devstack$ cd samples
stack@vmub-hadoop1:~/devstack/samples$ ls
local.conf  local.sh
```

### **Step 7: Copy “local.conf” file to “devstack”**

```
stack@vmub-hadoop1:~/devstack/samples$ cp local.conf ../
stack@vmub-hadoop1:~/devstack/samples$ cd ..
stack@vmub-hadoop1:~/devstack$ ls
clean.sh      doc      functions   gate      lib      Makefile
README.rst    samples  tests       unstack.sh
CONTRIBUTING.rst  extras.d  functions-common  HACKING.rst
```

LICENSE openrc roles stackrc tools  
data files FUTURE.rst inc **local.conf** playbooks  
run\_tests.sh stack.sh tox.ini

**Step 8: Open “local.conf” and edit the lines**

stack@vmub-hadoop1:~/devstack\$ nano local.conf

ADMIN\_PASSWORD=p1

DATABASE\_PASSWORD=p1

RABBIT\_PASSWORD=p1

SERVICE\_PASSWORD=p1

HOST\_IP=10.0.2.4

FLOATING\_RANGE=10.0.2.224/27

**Step 9: Remove the following files to Lock the error**

stack@vmub-hadoop1:~/devstack\$ sudo rm /var/lib/dpkg/lock

stack@vmub-hadoop1:~/devstack\$ sudo rm /var/lib/apt/lists/lock

stack@vmub-hadoop1:~/devstack\$ sudo rm /var/cache/apt/archives/lock

stack@vmub-hadoop1:~/devstack\$ sudo rm -rf /var/lib/apt/lists/\*

**Step 10: To install stack**

stack@vmub-hadoop1:~/devstack\$ FORCE=yes ./stack.sh

```

        print a[2]
    }
    ' /opt/stack/devstack/local.conf
+./stack.sh:main:1489                                set +o xtrace
=====
DevStack Component Timing
(times are in seconds)
=====
run_process           53
test_with_retry       2
apt-get-update        1
osc                   177
wait_for_service      21
dbsync                56
pip_install           149
apt-get               7
-----
Unaccounted time      418
=====
Total runtime         884

This is your host IP address: 10.128.0.8
This is your host IPv6 address: ::1
Horizon is now available at http://10.128.0.8/dashboard
Keystone is serving at http://10.128.0.8/identity/
The default users are: admin and demo
The password: StrongAdminSecret

WARNING:
Using lib/neutron-legacy is deprecated, and it will be removed in the future

Services are running under systemd unit files.
For more information see:
https://docs.openstack.org/devstack/latest/systemd.html

DevStack Version: train
Change: 16d11d27f375b8c027bbc3a1db1885e90ce6c604 Merge "Option "lock_path" from group "DEFAULT"
OS Version: Ubuntu 18.04 bionic

2019-06-04 12:19:19.207 | stack.sh completed in 884 seconds.

```

## Accessing OpenStack on a web browser

To access OpenStack via a web browser browse your Ubuntu's IP

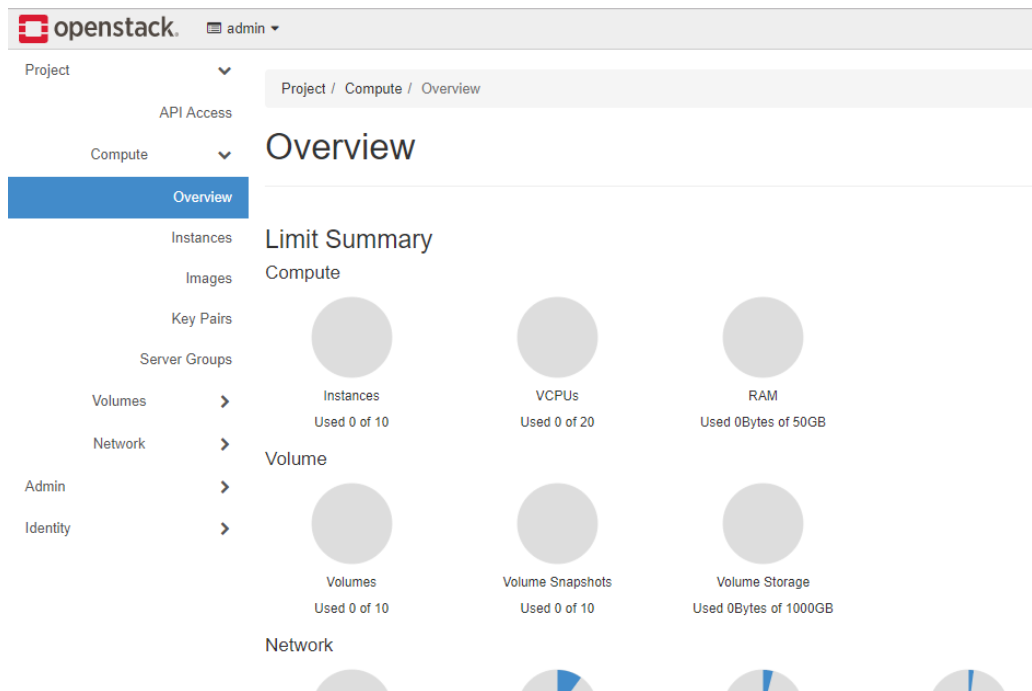
address as shown.

<https://server-ip/dashboard>

This directs you to a login page as shown.



The image shows the OpenStack login page. At the top center is the OpenStack logo, which consists of a red square with a white 'O' inside, followed by the word 'openstack' in a black, sans-serif font. Below the logo is the text 'Log in'. Underneath this are two input fields: 'User Name' and 'Password'. The 'User Name' field contains the letter 'I'. To the right of the 'Password' field is a small eye icon. At the bottom right of the form is a blue button with the text 'Sign In'.



The image shows the OpenStack dashboard overview page. At the top left is the OpenStack logo. To its right is a dropdown menu with 'admin' selected. Below the logo is a sidebar with a list of menu items: Project, API Access, Compute, Overview (highlighted in blue), Instances, Images, Key Pairs, Server Groups, Volumes, Network, Admin, and Identity. To the right of the sidebar is a breadcrumb trail: 'Project / Compute / Overview'. Below the breadcrumb trail is the title 'Overview'. The main content area is titled 'Limit Summary' and is divided into two sections: 'Compute' and 'Volume'. The 'Compute' section has three circular progress indicators for 'Instances' (Used 0 of 10), 'VCPUs' (Used 0 of 20), and 'RAM' (Used 0Bytes of 50GB). The 'Volume' section has three circular progress indicators for 'Volumes' (Used 0 of 10), 'Volume Snapshots' (Used 0 of 10), and 'Volume Storage' (Used 0Bytes of 1000GB). Below these sections is a 'Network' section with four circular progress indicators, each showing a small blue segment.