

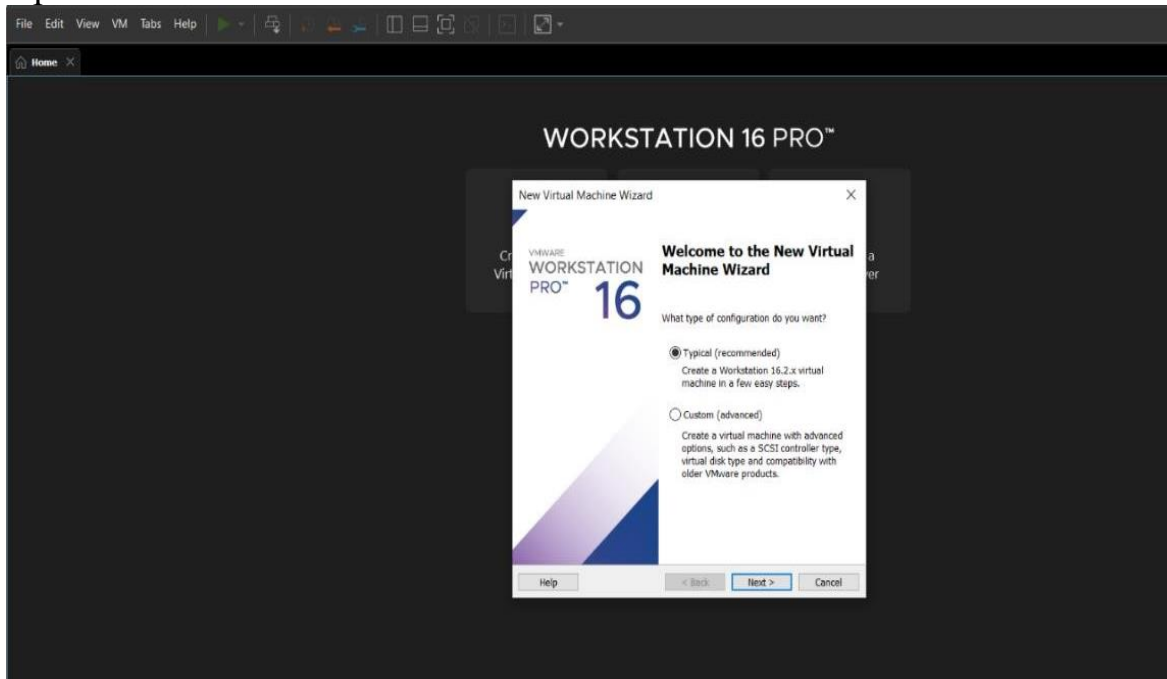
## PRACTICAL 4

**Aim: -Implementing IaaS using Eucalyptus**

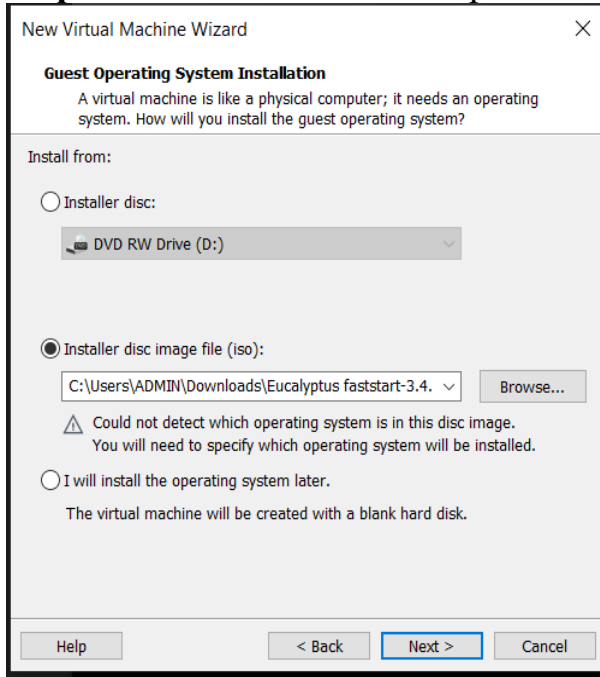
**Requirements: - VMware Workstation 17x, Eucalyptus faststart 3.4.1.iso file**

**Steps: -**

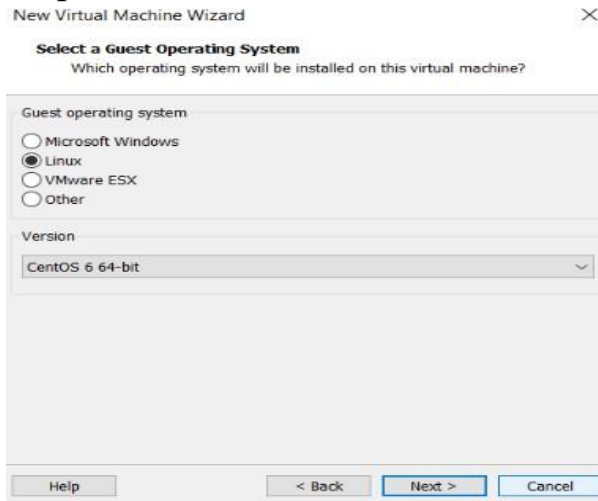
Open VMware workstation clicks on next.



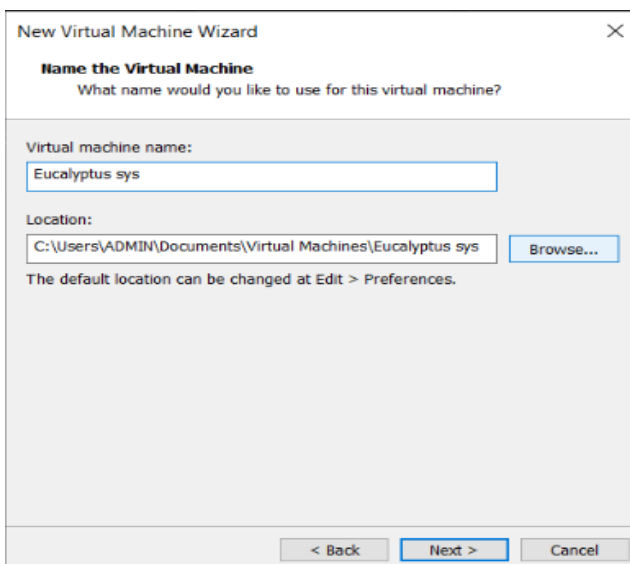
**Step1: -Click on Browse and upload the Eucalyptusfaststsr-3.4.1**



**Step2:** Click on Linux and version is CentOS 6 64-bit.



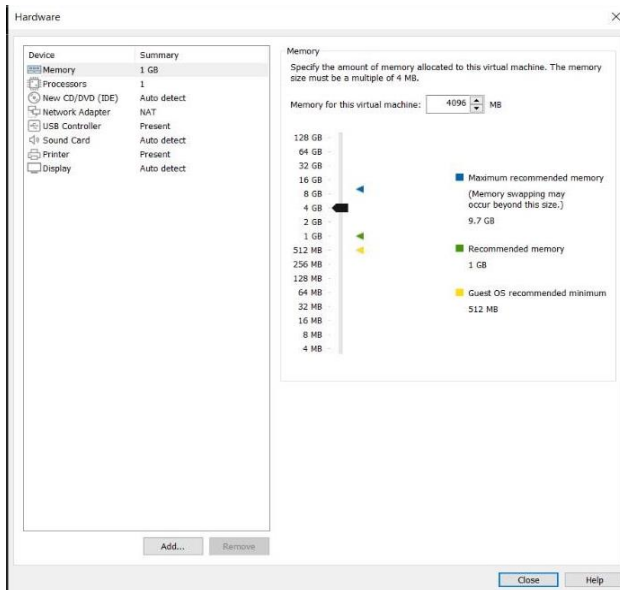
**Step3:** Name for virtual machine as “Eucalyptus”



**Step4:** Manual disk :40.0 and select -store virtual disk as single file.



**Step5:** Click on Custom Hardware & Give the memory storage as 4GB and then click on next & also Change the number of cores per processor as 2 and select virtualize intel VT-x/EPT and then in Network Adapters select bridge network connection and close and start the vm.

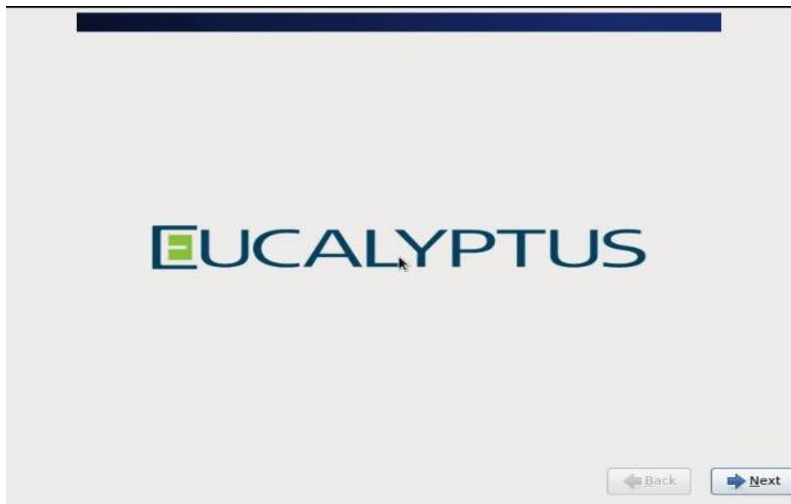


**Step6:** Select Install CentOS 6 with Eucalyptus Cloud-in-a-box and press enter.

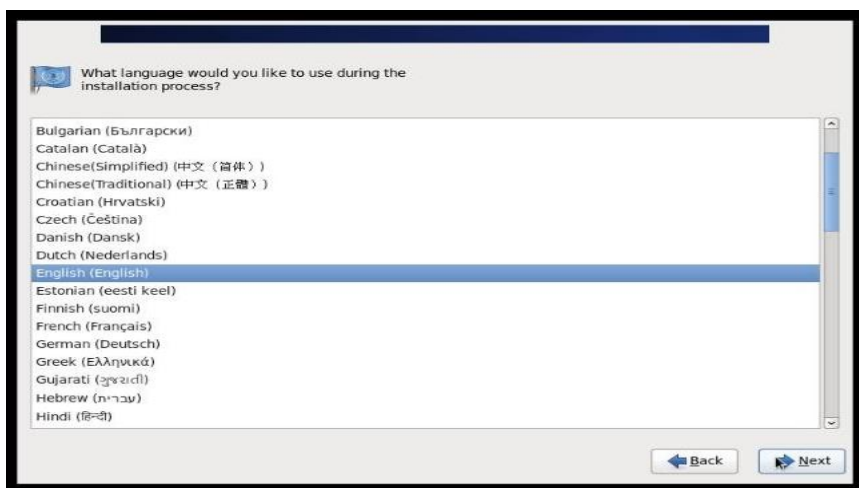
**Step7:** Skip and then OK



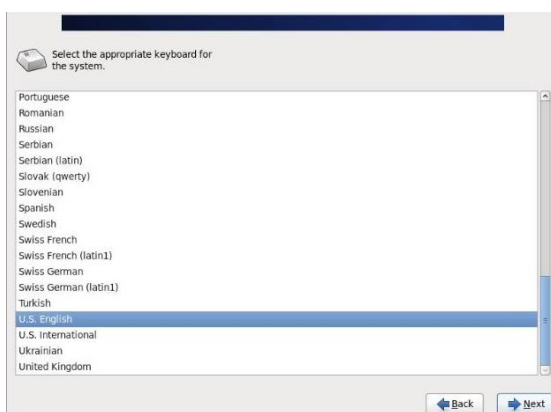
**Step8:** When the installation screen pops up **Click on Next**



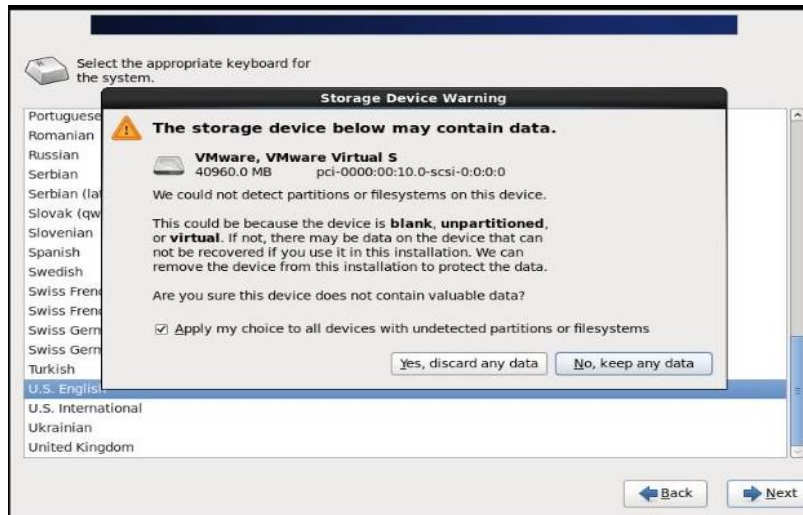
**Step9:** Select **English** Press Enter



**step10:** Select **U.S English** & Press Enter

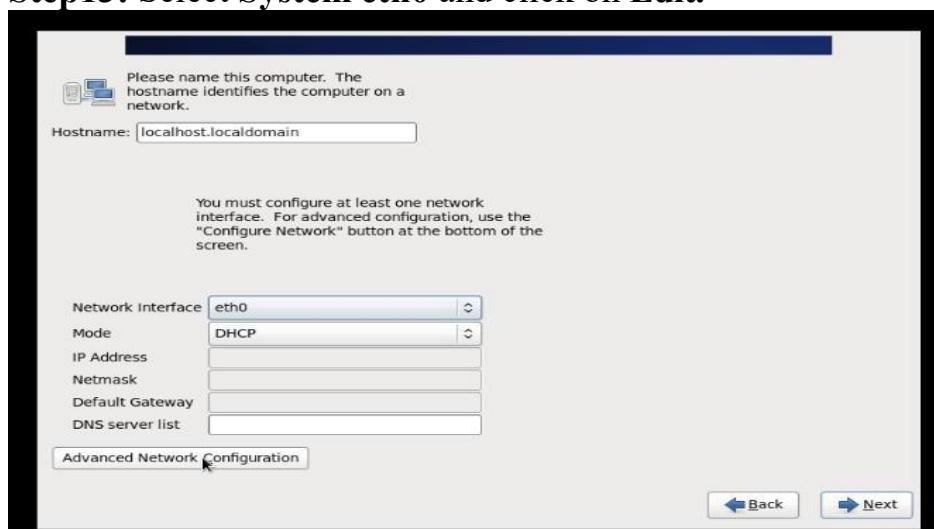


### Step11: Click on Yes, Discard any Data.

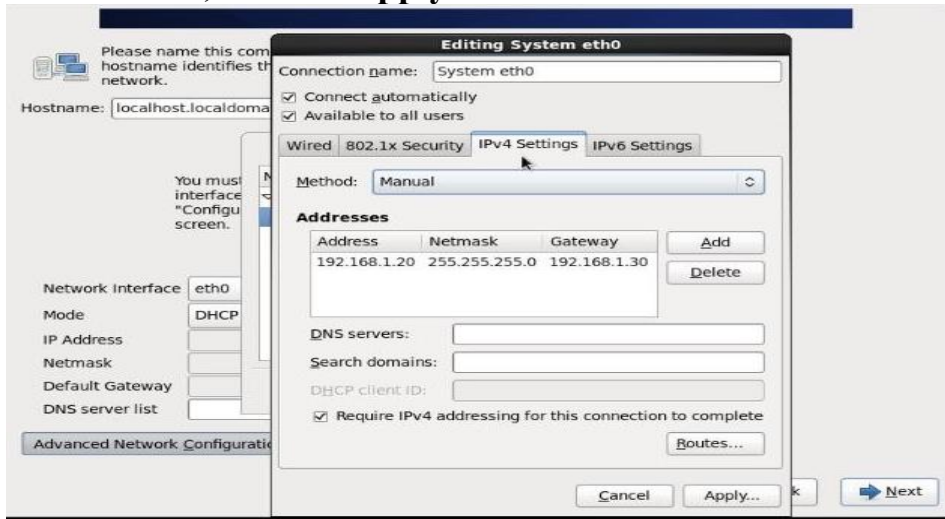


### Step12: Click on Advance Network Configuration

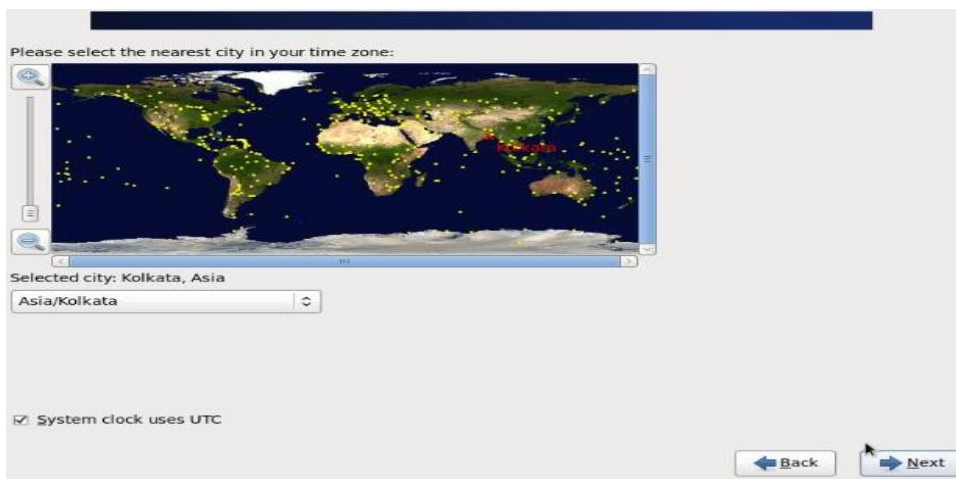
### Step13: Select System eth0 and click on Edit.



**Step14:** Click on Add Address as 192.168.1.20, Netmasks 255.255.255.0, Gateway as 192.168.1.30, click on Apply and click on Next.

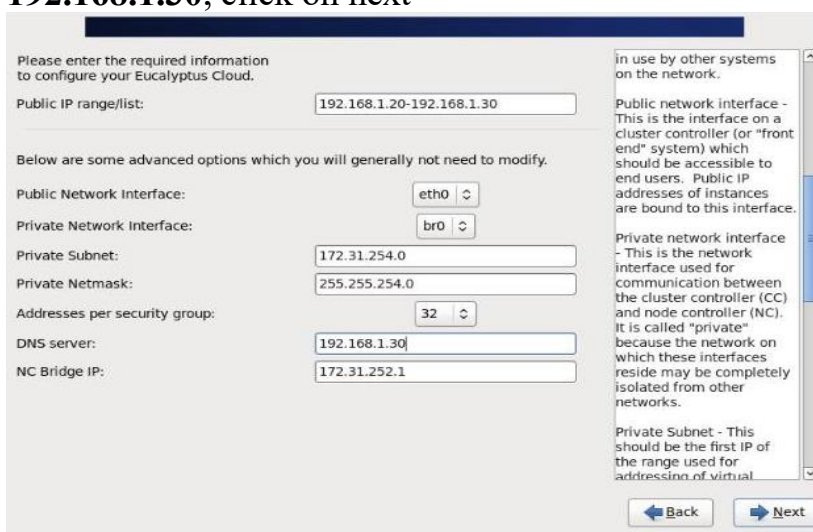


**Step15:** Select Asia, Kolkata and then next.



**Step16:** Create password and next.

**Step17:** Place *public IP range* 192.168.1.20-192.168.1.30 and *DNS server* as 192.168.1.30, click on next



**Step18: Select Create Custom layout, click on Next.**

Which type of installation would you like?

☐ **Use All Space**  
Removes all partitions on the selected device(s). This includes partitions created by other operating systems.  
**Tip:** This option will remove data from the selected device(s). Make sure you have backups.

☐ **Replace Existing Linux System(s)**  
Removes only Linux partitions (created from a previous Linux installation). This does not remove other partitions you may have on your storage device(s) (such as VFAT or FAT32).  
**Tip:** This option will remove data from the selected device(s). Make sure you have backups.

☐ **Shrink Current System**  
Shrinks existing partitions to create free space for the default layout.

☐ **Use Free Space**  
Retains your current data and partitions and uses only the unpartitioned space on the selected device(s), assuming you have enough free space available.

☒ **Create Custom Layout**  
Manually create your own custom layout on the selected device(s) using our partitioning tool.

☐ Encrypt system  
☒ Review and modify partitioning layout

**Step19: Select Standard partition and click on Create.**

Drive /dev/sda (40960 MB) (Model: VMware, VMware Virtual S)

Free 40955 MB

Device	Size (MB)	Mount	RAID
Hard Drives			
sda (/dev/sda)			
Free	40954		

**Create Storage**

☒ **Create Partition**  
General purpose partition creation

☐ **Create Software RAID** Information  
RAID Partition  
Create a RAID formatted partition  
RAID Device  
Requires at least 2 free RAID formatted partitions

☐ **Create LVM** Information  
LVM Volume Group  
Requires at least 1 free LVM formatted partition  
LVM Logical Volume  
Create a logical volume on selected volume group  
LVM Physical Volume  
Create an LVM formatted partition

**Step20: Give mount point as /boot, size as 100MB and click on OK.**

Drive /dev/sda (40960 MB) (Model: VMware, VMware Virtual S)

**Add Partition**

Mount Point: /boot

File System Type: ext4

Drive	Size	Model
<input checked="" type="checkbox"/> sda	40960 MB	VMware, VMware Virtual S

Allowable Drives:

Size (MB): 100

Additional Size Options:

☒ Fixed size

☐ Fill all space up to (MB): 100

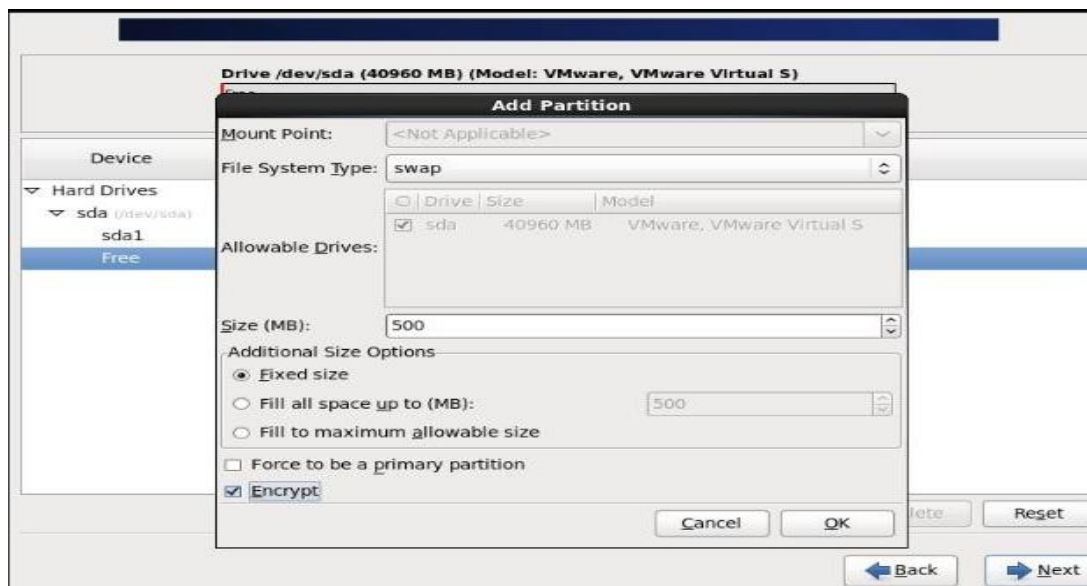
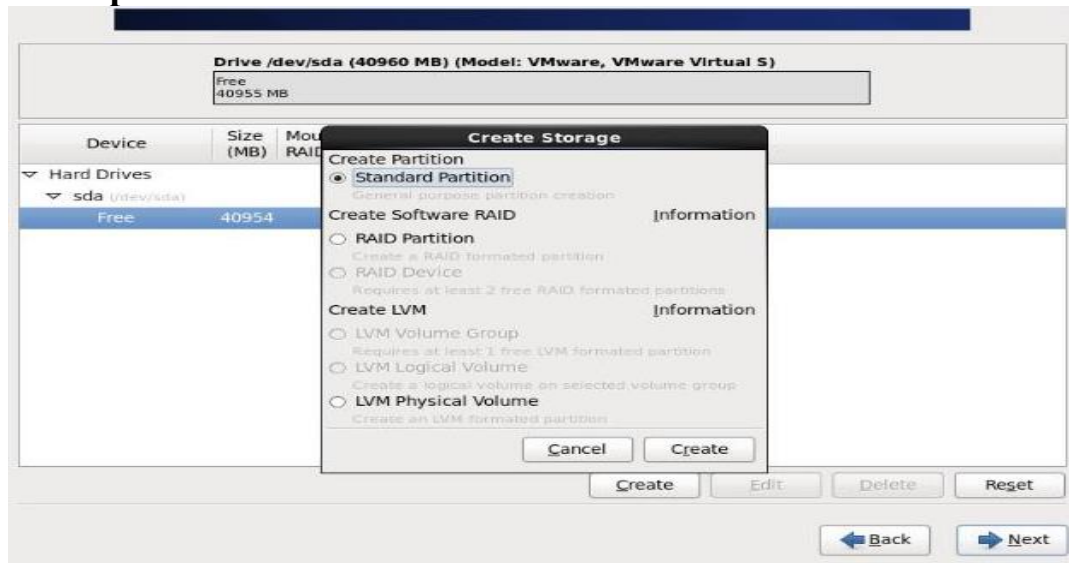
☐ Fill to maximum allowable size

☐ Force to be a primary partition

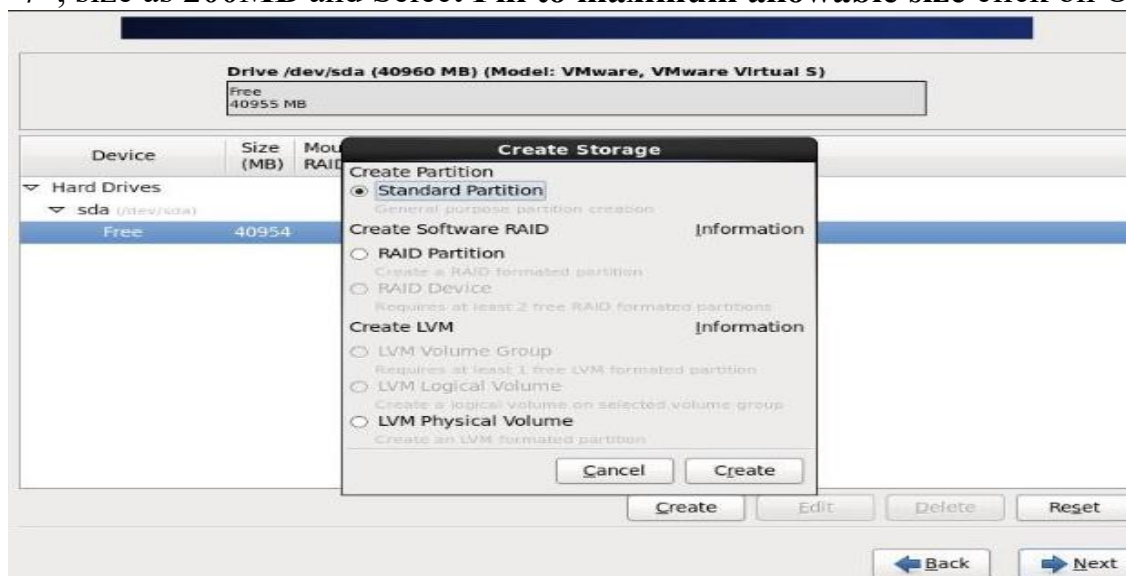
☐ Encrypt



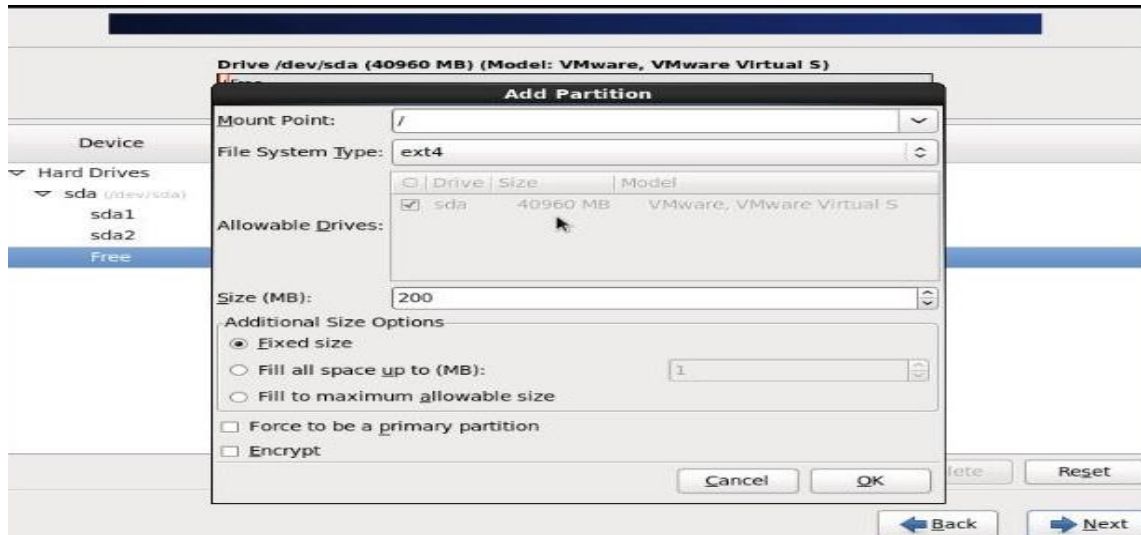
**Step21:** Again, Select **Standard partition** and click on Create & Select File System Type as **swap** size as **200MB** and click on OK.



**Step22:** Again, Select **Standard partition** and click on Create & Give mount point as **"/"**, size as **200MB** and Select **Fill to maximum allowable size** click on OK.

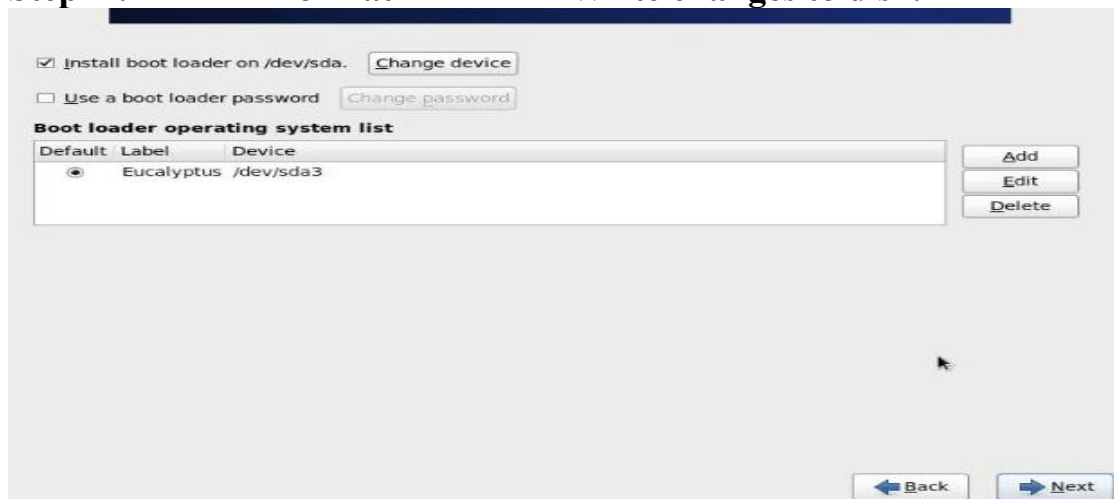






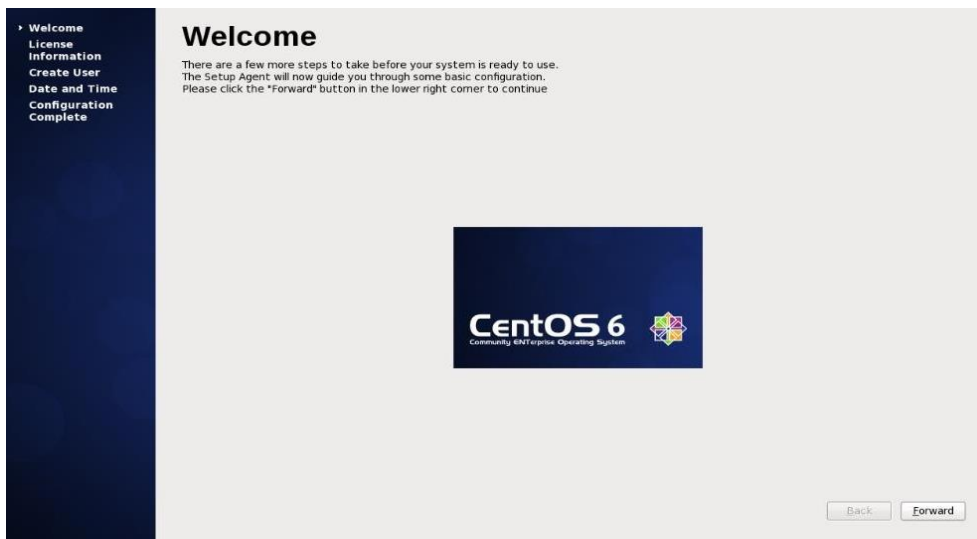
**Step23:** Click on Next

**Step24:** Click on **Format** & click on **Write changes to disk**.




**Step25:** Click Next and Finish



**Step26: Click on Reboot****Step27: Click on Forward**


The screenshot shows the CentOS 6 installation 'Welcome' screen. On the left is a dark blue sidebar with a list of steps: 'Welcome' (selected), 'License Information', 'Create User', 'Date and Time', and 'Configuration Complete'. The main area has the title 'Welcome' and a paragraph: 'There are a few more steps to take before your system is ready to use. The Setup Agent will now guide you through some basic configuration. Please click the "Forward" button in the lower right corner to continue.' In the center is the CentOS 6 logo with the text 'CentOS 6' and 'Community Enterprise Operating System'. At the bottom right are 'Back' and 'Forward' buttons.

**Step28: Click on “Yes, I agree the license Agreement” and Forward**


The screenshot shows the 'License Information' screen. The sidebar on the left has 'License Information' selected. The main area is titled 'License Information' and contains the 'CentOS-6 EULA' text. At the bottom, there are two radio buttons: 'Yes, I agree to the License Agreement' (which is selected) and 'No, I do not agree'. 'Back' and 'Forward' buttons are at the bottom right.

**Step29: Fill up username, Full name, password & confirm Password of your choice.**


The screenshot shows the 'Create User' screen. The sidebar on the left has 'Create User' selected. The main area is titled 'Create User' and contains instructions: 'You must create a "username" for regular (non-administrative) use of your system. To create a system "username", please provide the information requested below.' There are four input fields: 'Username:' (containing 'yogesh'), 'Full Name:' (containing 'yogesh'), 'Password:' (masked with dots), and 'Confirm Password:' (masked with dots). Below these are two buttons: 'Use Network Login...' and 'Advanced...'. At the bottom right are 'Back' and 'Forward' buttons.

## Step30: Click Forward & Finish

**Welcome**  
License  
Information  
Create User  
Date and Time  
Configuration  
Complete

### Date and Time

Please set the date and time for the system.

Date and Time  
Current date and time: Mon 14 Oct 2024 04:13:10 AM IST  
☒ Synchronize date and time over the network

Synchronize date and time on your computer with a remote time server using the Network Time Protocol:

**NTP Servers**

0.centos.pool.ntp.org	Add Edit Delete
1.centos.pool.ntp.org	
2.centos.pool.ntp.org	

Advanced Options

Back Forward

## Step31: Click on Name & Enter the password and login.

**Welcome**  
License  
Information  
Create User  
Date and Time  
Configuration  
Complete

### Configuration Complete

Your eucalyptus installation is now complete. You may now login to the local desktop environment on this system, or you can use a web browser to connect from a remote system. Please make note of the following login credentials:

User Console URL (for managing instances, volumes, etc.):  
https://192.168.1.20:8888/

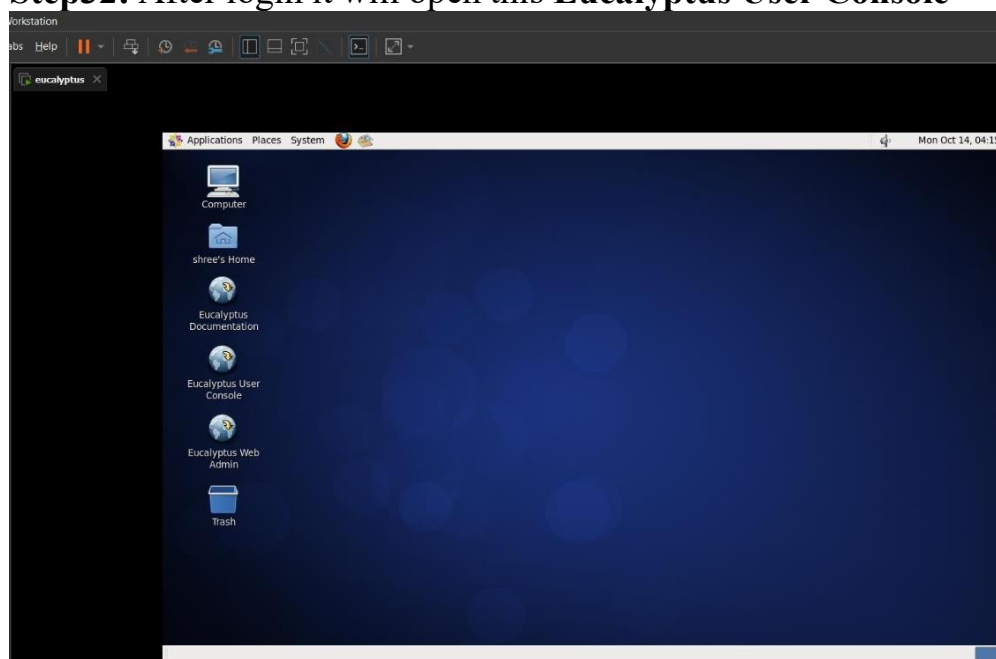
User Credentials:  
\* Account: demo  
\* Username: admin  
\* Password: password

Admin Console URL (for managing user accounts, VM types, etc.):  
https://192.168.1.20:8443

Admin Credentials:  
\* Account: eucalyptus  
\* Username: admin  
\* Password: admin

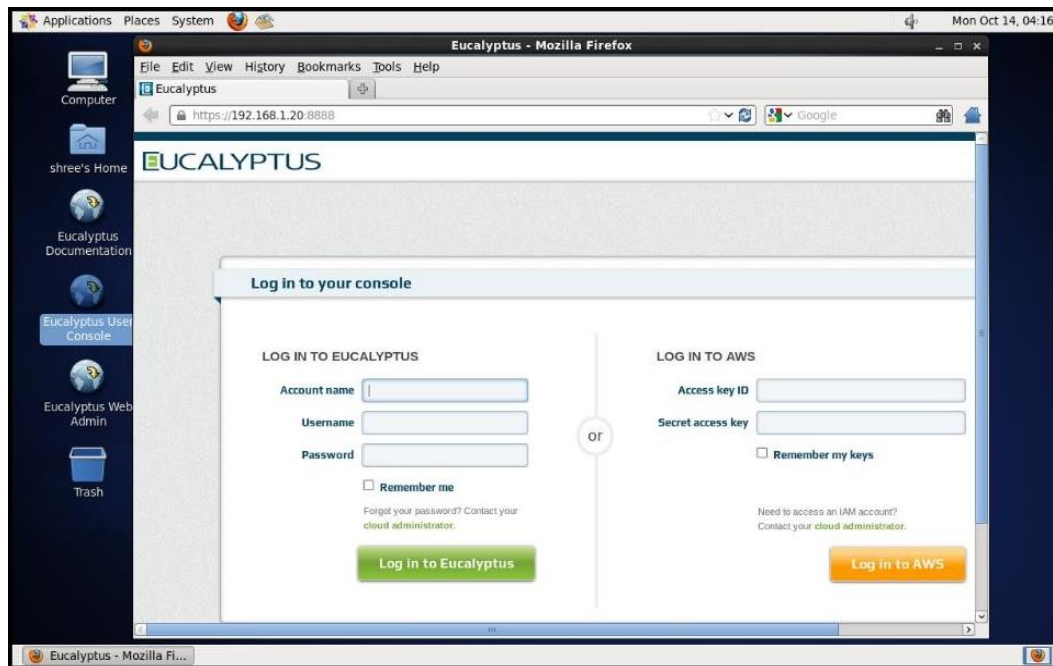
Back Finish

## Step32: After login it will open this Eucalyptus User Console

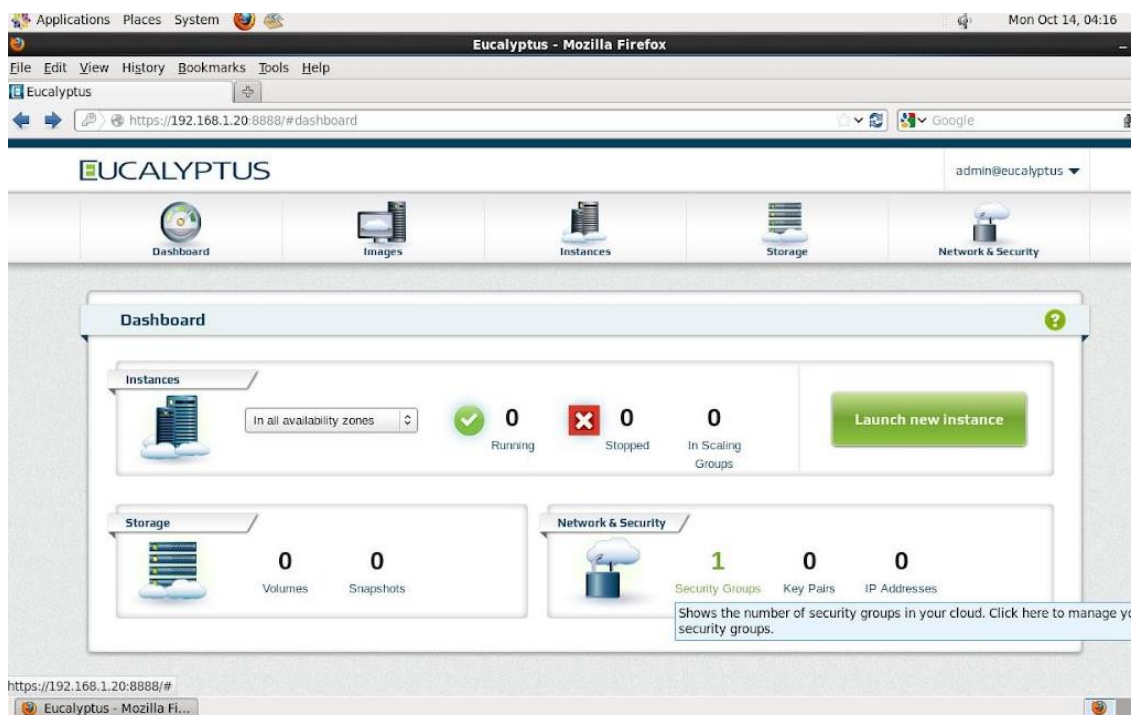


**Step33:** Now First Click on **Understand the risk** and then add exception

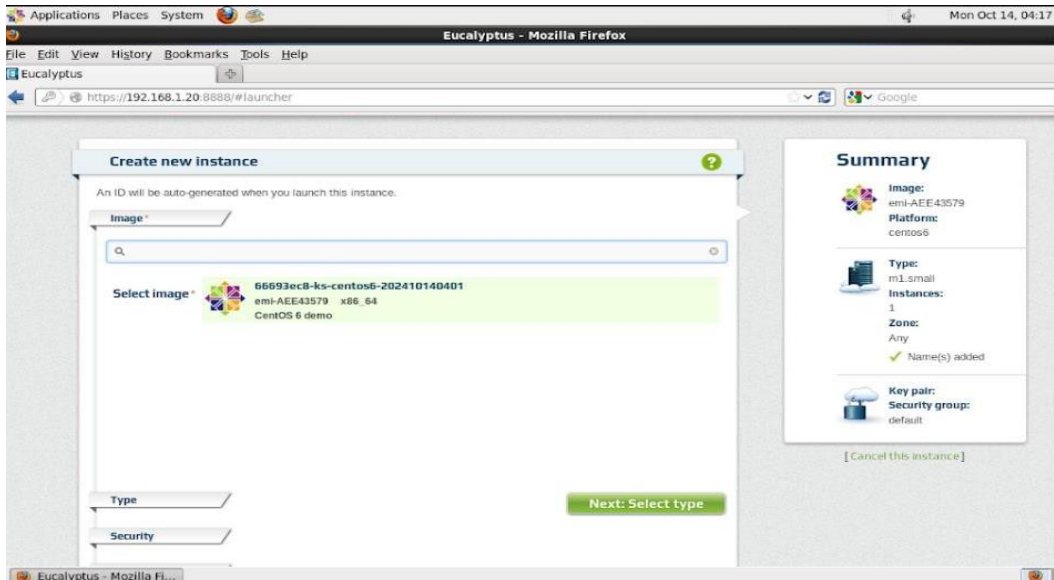
**Step34:** Login to Eucalyptus



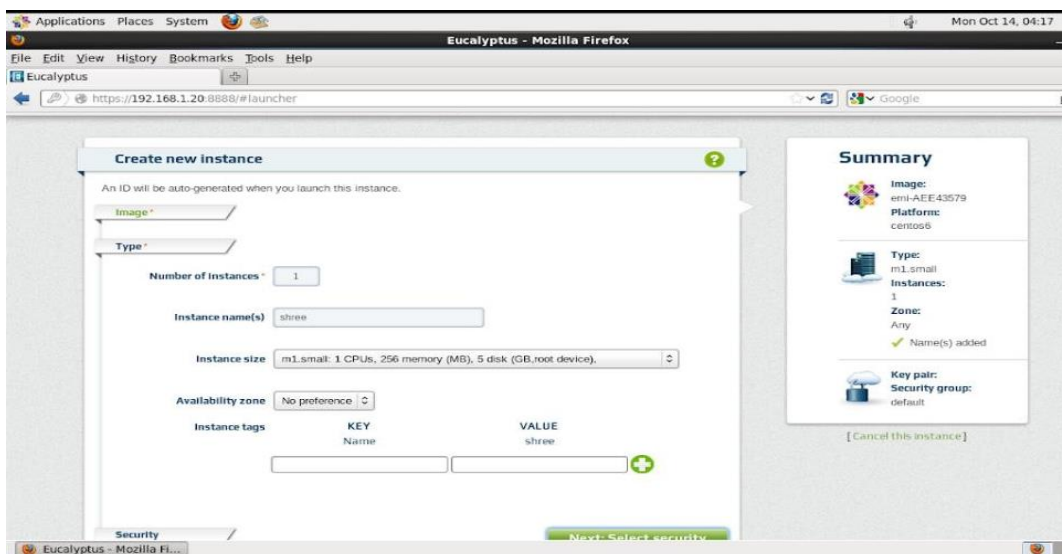
**Step35:** Create instance by Clicking on “Launch new Instance”



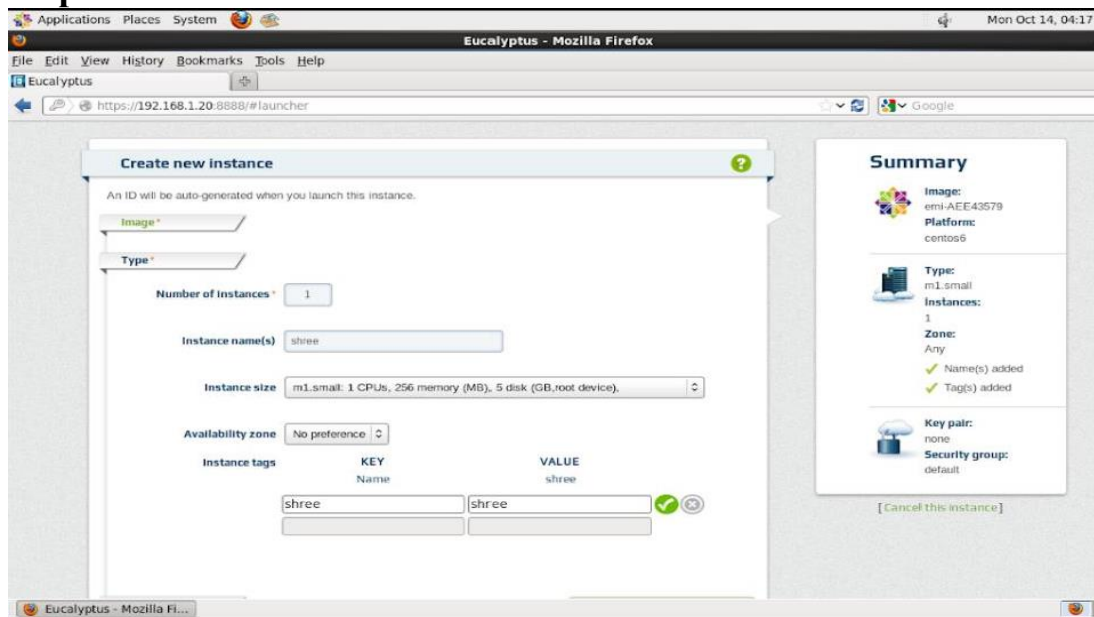
**Step36:** Click on **Next: Select Type** and give the **instance name** as **Eucalyptus** and **key name** is **yogesh**.



**Step37:** In security, **Select key name: none** and leave others by default.



## Step38: Click on Launch Instance



## Step39: After clicking on launch instance, it will display this window.

