Lesson 6 Demo 1: Install Mirantis Launchpad CLI

This section will guide you to:

* Install Mirantis launchpad CLI

This lab has five subsections, namely:

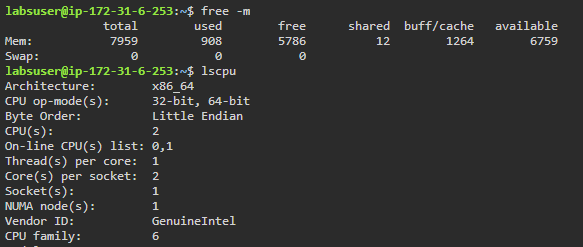
1. Ensuring minimum requirements for the master and worker node’s servers
2. Configuring an SSH connection between all servers using **ssh-keygen**
3. Downloading and configuring the launchpad binary file
4. Creating a **launchpad.yml** file to configure the MKE installation
5. Registering the launchpad and applying configuration settings for the MKE cluster

**Step 1:** Ensuring minimum requirements for the master and worker node’s servers

* Open **master node** and run the following commands to check the disk space required for **installing MKE** (minimum of 8GB RAM, 10GB hard-disk, and 2 vCPUs):

*free -m*

*lscpu*

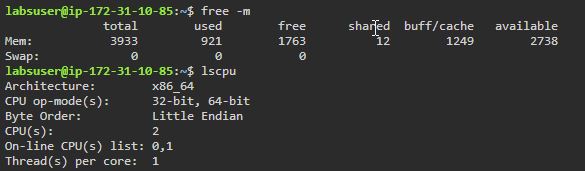


**Note:** The master node will be used for installing MKE and will act as a Manager node.

* Open **worker1 node** and run the following commands to check the space required for **installing DTR** (minimum of 4GB RAM, 10GB hard-disk, and 2 vCPUs):

*free -m*

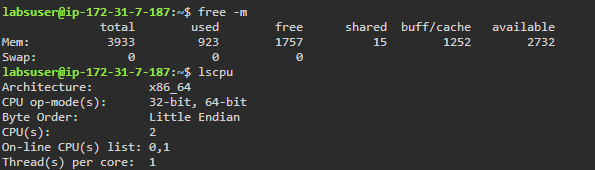
*lscpu*



* Open **worker2 node** and run the following commands to check the space required for **installing Mirantis Launchpad** (minimum of 4GB RAM, 10GB hard-disk, and 2 vCPUs):

*free -m*

*lscpu*

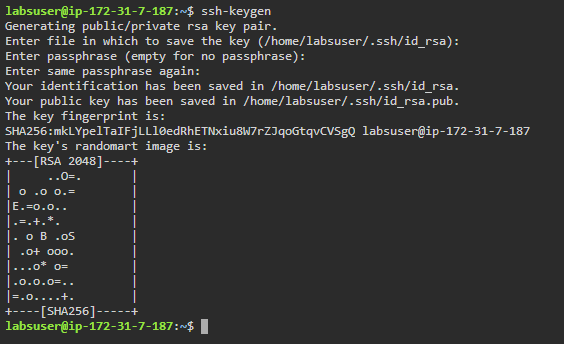


**Step 2:** Configuring an SSH connection between all servers using **ssh-keygen**

* Go to worker2 node and generate an **ssh key** for the bot user

*ssh-keygen*

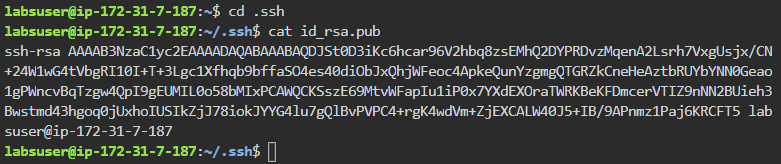
**Note:** Press **enter** for all the fields required for ssh-keygen set up



* Copy the **public ssh key** content from the **worker2 node**

*cd .ssh*

*cat id\_rsa.pub*

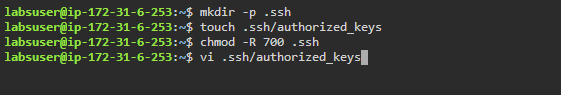


* Go to the **master node** and use the following commands to generate the **authorized\_keys** for **master node**:

*touch .ssh/authorized\_keys*

*chmod -R 700 .ssh*

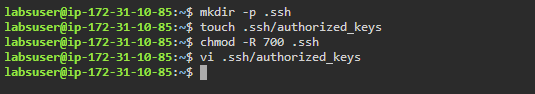
*vi .ssh/authorized\_keys*

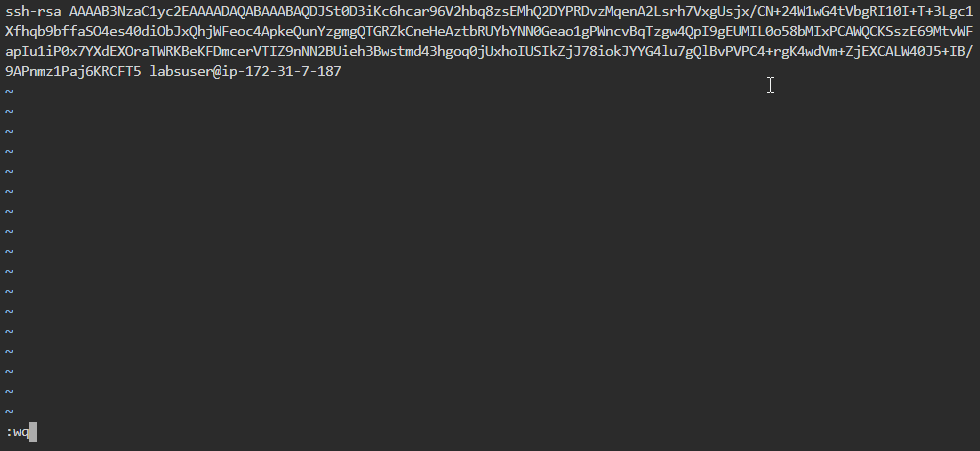


**Note:** In the last step, an editor will open. Press **i** for Insert mode, paste the copied **public ssh key** content, and then press **esc** and type **:wq** to save the file



* Repeat all the commands from the previous step to generate the **authorized\_keys** for the **worker1 node**

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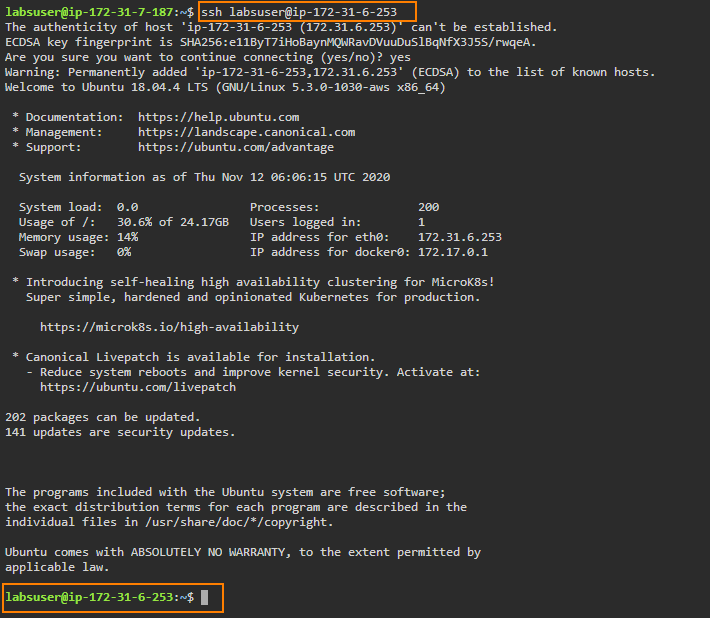
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* Check the connection to **master** and **worker1 node** servers from the bot user on **worker2 node** server

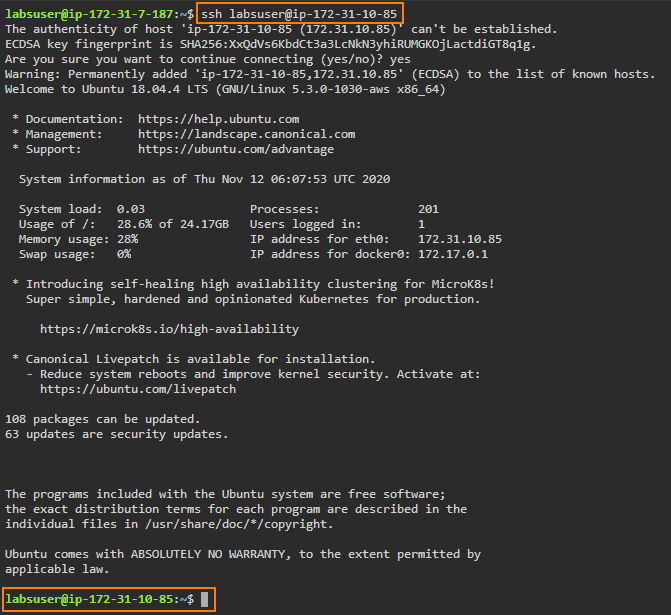
*ssh labsuser@ip-address\_master\_node\_server*

*ssh labsuser@ip-address\_worker1\_node\_server*

**Note:** Use **hostname -i** command in the respective nodes to get the private IP address of the **master** and **worker1 nodes**



**Note:** Use the **logout** command to end the remote connection

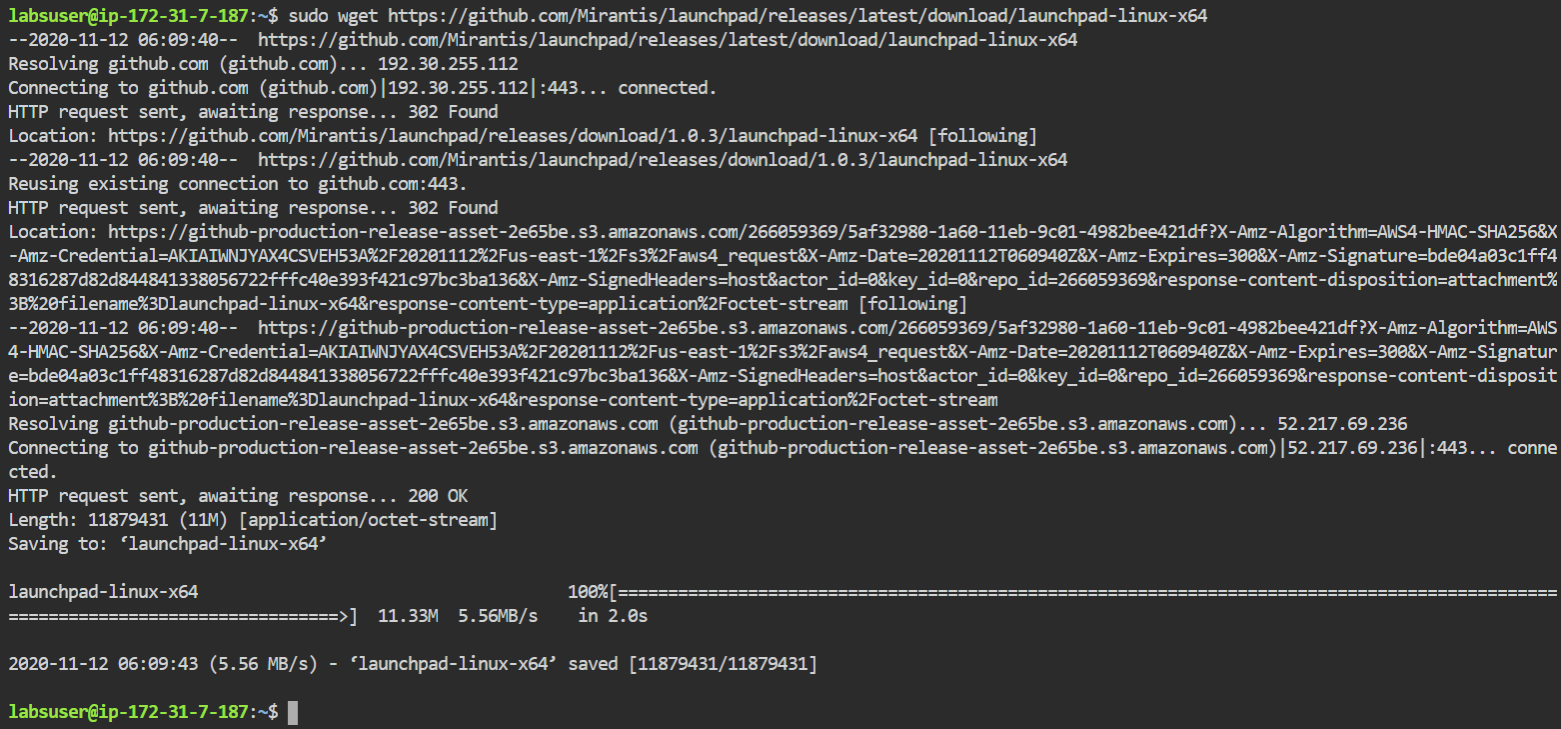


**Note:** Use the **logout** command to end the remote connection

**Step 3:** Downloading and configuring the launchpad binary file

* Go to **worker2 node** and download the launchpad

*sudo wget https://github.com/Mirantis/launchpad/releases/latest/download/launchpad-linux-x64*

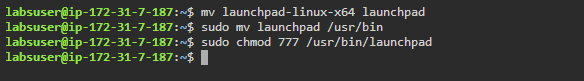


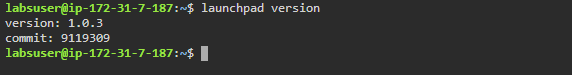
* Use the following commands to move the launchpad file to **/usr/bin** and give necessary permissions:

*mv launchpad-linux-x64 launchpad*

*sudo mv launchpad /usr/bin*

*sudo chmod 777 /usr/bin/launchpad*



* Check the launchpad version

**Step 4:** Creating a **launchpad.yml** file to configure the MKE installation

* Configure a new file **launchpad.yml** on the **worker2 node** (launchpad server)

*vi launchpad.yml*

* Add the following content in the **launchpad.yml** file:

*apiVersion: launchpad.mirantis.com/mke/v1.1*

*kind: mke*

*metadata:*

*name: my-mke*

*spec:*

*mke:*

*adminUsername: admin*

*adminPassword: passw0rd!*

*installFlags:*

*- --default-node-orchestrator=kubernetes*

*- --pod-cidr 10.0.0.0/16*

*hosts:*

*- address: 172.31.20.2 #Private IP address of the manager node*

*role: manager*

*ssh:*

*keyPath: /home/labsuser/.ssh/id\_rsa*

*user: labsuser*

*privateInterface: eth0*

*- address: 172.31.20.150 #Private IP address of the worker1 node*

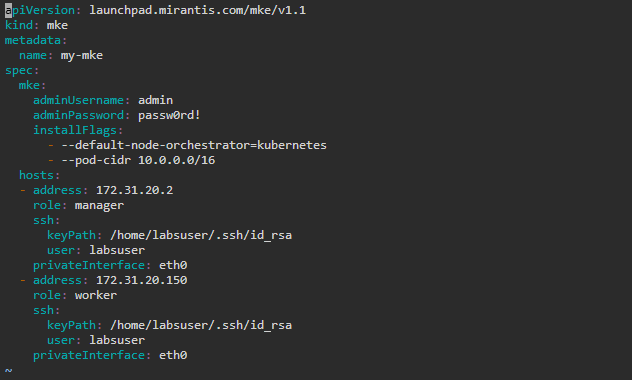
*role: worker*

*ssh:*

*keyPath: /home/labsuser/.ssh/id\_rsa*

*user: labsuser*

*privateInterface: eth0*

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**Step 5:** Registering the launchpad and applying configuration settings for the MKE cluster

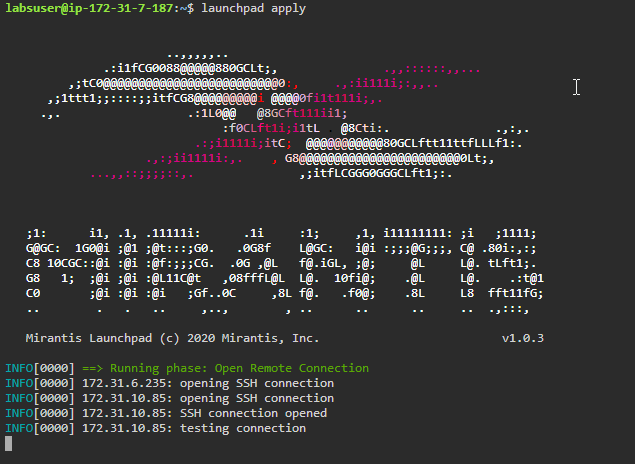
* Use the following command to register the launchpad:

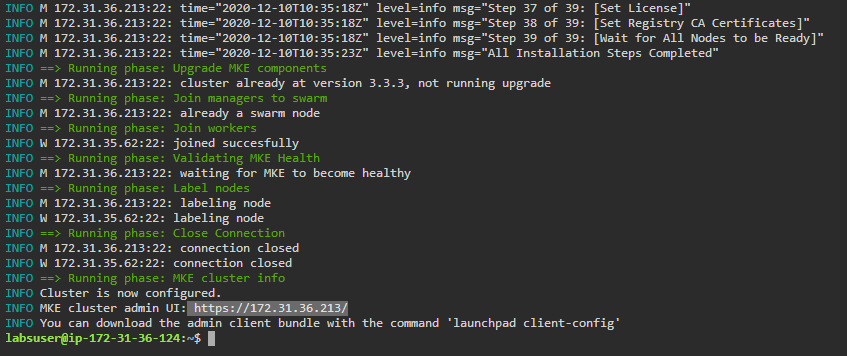
*launchpad register*



* Run the following command to set up the launchpad:

*launchpad apply*



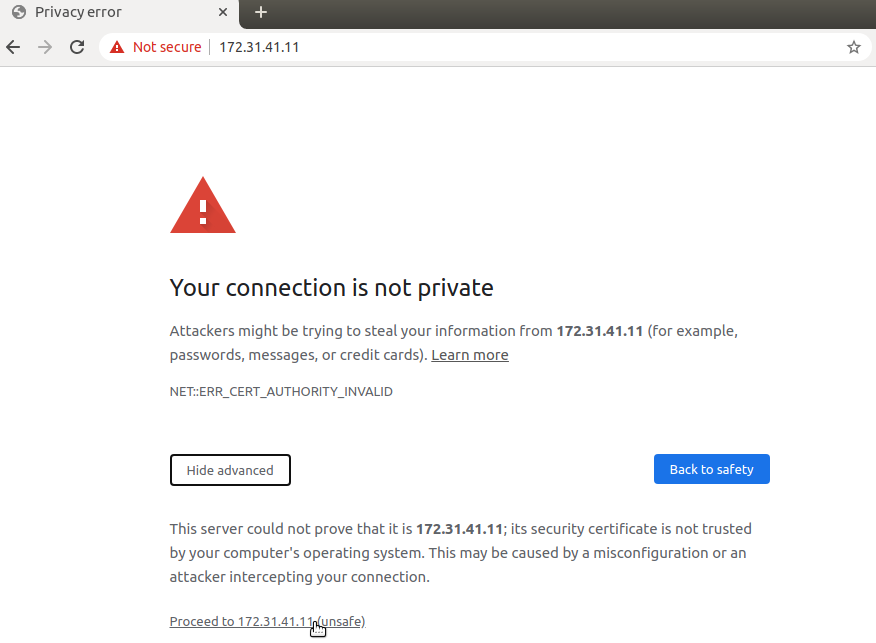


**Note:** Copy the URL for **MKE cluster admin UI**

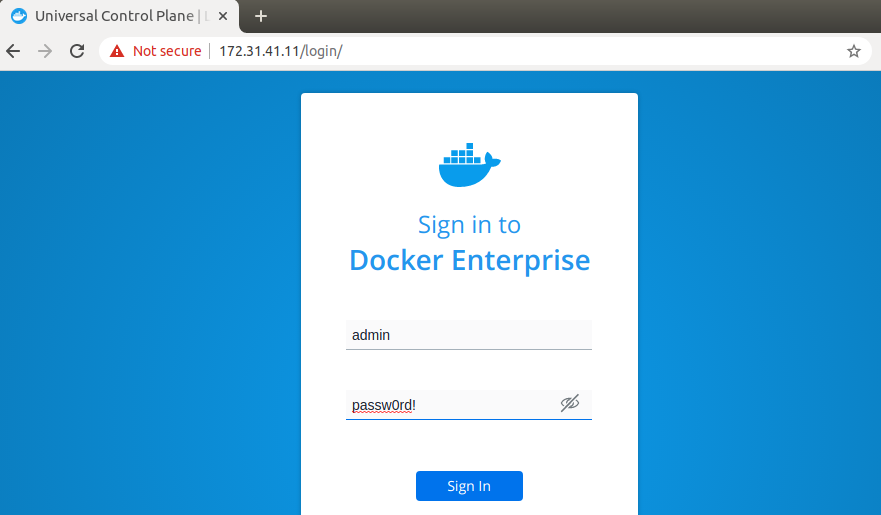
* Go to the master node and open the **desktop** window



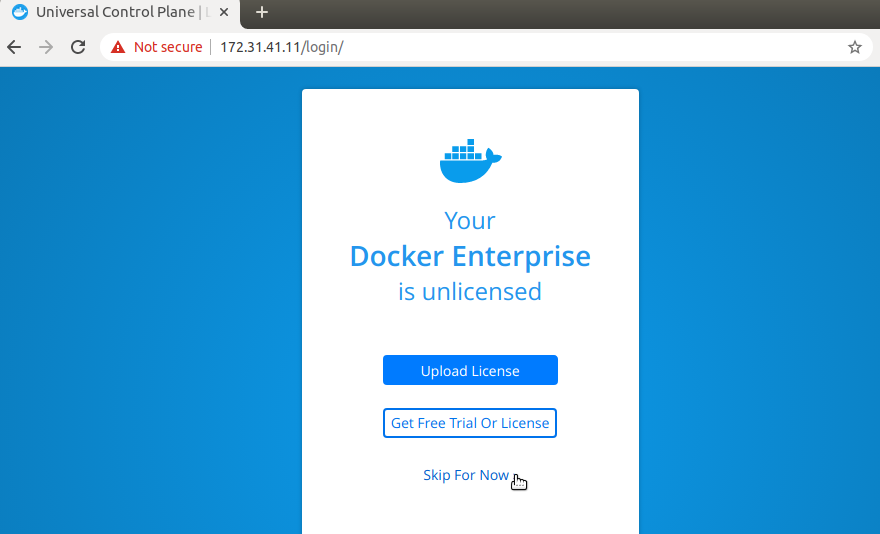
* Open the browser and paste the URL for MKE Cluster admin UI
* On the webpage, Click on **Advanced** button and then click on **Proceed to <MKE URL>** where <MKE URL> is the copied link from CLI



* Enter the login credentials you set up in *launchpad.yml* file and click on the **Sign In** button



* On the next screen, click on **Skip For Now** to directly login into MKE

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**Note:** Notice that we have not uploaded a license or got a free license because Mirantis has stopped providing Free License for MKE. So we will continue without a license.

* The MKE dashboard will look like the following screenshot:

