**Assisted Practice: Install Chef Server and Chef Workstation**

This section will guide you to:

Install and configure Chef.

This lab has three sub-sections, namely:

3.1.1 Installing Chef Server

3.1.2 Creating Chef User and Organization

3.1.3 Installing Chef Workstation

**Note:** Before configuring the chef on your system, make sure all the servers are up to date. Run the below command to check the same.

sudo apt update   
sudo apt upgrade

**Step 3.1.1:** **Install Chef Server**

1. Download the [latest Chef server core](https://downloads.chef.io/chef-server/#ubuntu):  
   wget <https://packages.chef.io/files/stable/chef-server/13.1.13/ubuntu/18.04/chef-server-core_13.1.13-1_amd64.deb>
2. Install the server:  
   sudo dpkg -i chef-server-core\_\*.deb
3. Remove the downloaded file:  
   rm chef-server-core\_\*.deb
4. The Chef server includes a command line utility called chef-server-ctl.   
     
   Run chef-server-ctl to start the Chef server services with the help of below command:  
   sudo chef-server-ctl reconfigure

**Step 3.1.2:** **Create Chef User and Organization**

1. In order to link workstations and nodes to the Chef server, create an administrator and organization with associated RSA private keys.  
   From the home directory, create a **.chef** directory to store the keys:

mkdir .chef

1. Use chef-server-ctl to create a user. In this example, change the following to match your needs: *USER\_NAME, FIRST\_NAME, LAST\_NAME, EMAIL, and PASSWORD*. Adjust *USER\_NAME.pem*, and leave the *.pem* extension as shown in the below command.

sudo chef-server-ctl user-create USER\_NAME FIRST\_NAME LAST\_NAME EMAIL 'PASSWORD' --filename ~/.chef/USER\_NAME.pem

1. To view a list of all users on your Chef server issue the following command:

sudo chef-server-ctl user-list

1. Create an organization and add the user created in the previous step to the admins and billing admins security groups.
2. Replace ***ORG\_NAME*** with a short identifier for the organization, ***ORG\_FULL\_NAME*** with the organizations' complete name,***USER\_NAME*** with the username created in the step above, and ***ORG\_NAME.pem***with organization’s short identifier followed by .pem:

sudo chef-server-ctl org-create ORG\_NAME "ORG\_FULL\_NAME" --association\_user USER\_NAME --filename ~/.chef/ORG\_NAME.pem

***Note: ORG\_NAME must be in all lower case.***  
6. To view a list of all organizations on your Chef server, use the following command:

sudo chef-server-ctl org-list

With the Chef server installed and the RSA keys generated, you can begin configuring your workstation. The workstation is where all major configurations will be created for your nodes.

After this, configure Chef Manage with the help of below commands:

sudo chef-server-ctl install chef-manage

sudo chef-server-ctl reconfigure

sudo chef-manage-ctl reconfigure --accept-license

Connect to <https://localhost/chef> and connect with the credentials created above

**Step 3.1.3:** **Install Chef Workstation**

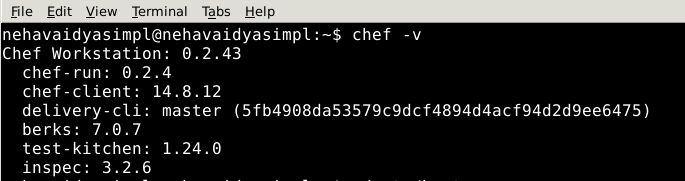
1. Get the package of the chef workstation with the help of below command:  
    wget https://packages.chef.io/files/stable/chef-workstation/21.1.233/ubuntu/18.04/chef-workstation\_21.1.233-1\_amd64.deb
2. Install Chef Workstation with the help of below command:

sudo dpkg -i chef-workstation\_\*.deb

or

dpkg -i chef-workstation\_20.12.212-1\_amd64.deb

Now you can verify the configuration using **chef -v** command as shown below.

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