Lesson 3 Demo 1: Install Chef Server and Chef Workstation

This section will guide you to:

* Install and configure Chef

This lab has three sub-sections, namely:

1. Installing Chef Server
2. Creating Chef User and Organization
3. Installing Chef Workstation

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

**sudo apt update   
sudo apt upgrade**

In case you get a lock error while running the upgrade command, execute the following commands to resolve it.  
  
**sudo rm /var/lib/dpkg/lock-frontend**

**sudo rm /var/lib/dpkg/lock**

**sudo reboot**

**Step 1:** **Install Chef Server**

* Download the [latest Chef server core](https://downloads.chef.io/chef-server/#ubuntu) by running the following command in the terminal:

**wget** [**https://packages.chef.io/files/stable/chef-server/14.1.0/ubuntu/18.04/chef-server-core\_14.1.0-1\_amd64.deb**](https://packages.chef.io/files/stable/chef-server/14.1.0/ubuntu/18.04/chef-server-core_14.1.0-1_amd64.deb)

* Install the server using the command given below:

**sudo dpkg -i chef-server-core\_\*.deb**

* Remove the downloaded file using the command:

**rm chef-server-core\_\*.deb**

* 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**

**Note:** You might have to accept the license by typing **yes** when prompted.

**Step 2:** **Create Chef User and Organization**

* 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**

**Note:** In case it throws an error: Already existing run **rmdir .chef** and then run the above command.

* Use chef-server-ctl to create a user

*In the command given below, change the following to match your needs:*

*<USER\_NAME> :* **Your Lab Username**

*<FIRST\_NAME> :* **John**

*<LAST\_NAME> :* **Carpenter**

*<EMAIL> :* **Your personal email-id**

*<PASSWORD>:* **john@123**

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

**Note**: *Remember the <USER\_NAME> <EMAIL> and <PASSWORD> as you will need it to login later.*

* To view a list of all users on your Chef server run the following command:

**sudo chef-server-ctl user-list**

* Create an organization and add the user created in the previous step to the admins and billing admins security groups

*Replace the following placeholders in the command as shown below:*

*<ORG\_NAME> :* **simplilearn**

*<ORG\_FULL\_NAME> :* **simplilearnltd**

*<USER\_NAME> :***Your Lab Username**

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

* 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 by executing the below commands one by one in the terminal:

**Note:** You might receive a dpkg lock error. Please resolve it by below commands:

**sudo rm /var/lib/dpkg/lock-frontend**

**sudo rm /var/lib/dpkg/lock**

**sudo chef-server-ctl install chef-manage**

**sudo chef-server-ctl reconfigure**

**sudo chef-manage-ctl reconfigure**

* To get the UI working, run the following command:

**sudo opscode-manage-ctl reconfigure**

* Then go to <https://localhost> and login with username and password you provided

***Note:*** *Click on the advanced tab in the lab’s browser while navigating to* [*https://localhost*](https://localhost/chef) *and click on proceed to local host in order to open the chef console.*

**Step 3:** **Install Chef Workstation**

* 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**

* Install Chef Workstation with the help of below commands:

**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:

