Chef install and configuration steps

**Prerequisites**

# vi /etc/hosts

192.168.56.101 uchefwork

192.168.56.102 uchefclient1

192.168.56.103 uchefclient2

**Workstation**

**I Install Workstation**

Step 1

# hostnamectl set-hostname uchefwork

<https://downloads.chef.io/chefdk>

or from direct link

<https://packages.chef.io/files/stable/chefdk/4.3.13/ubuntu/18.04/chefdk_4.3.13-1_amd64.deb>

Download chefdk for ubuntu in windows and share it via vbox

Folder path : downloaded path in windows 10

Folder name : chef

Enable automount

Click ok

Step 2

# mkdir ~/winshare

# mount -t vboxsf chef ~/winshare

# cd winsahre/chefdk

# dpkg -i chefdk\_4.3.13-1\_amd64.deb

# chef //to cross check

# cd

# mkdir chef-repo

**II Workstation Configuration steps**

**Recipes**

1. **Create MOTD**
2. **create a motd file to display Hello World**

# vim hello.rb

file ‘motd’ do

content ‘hello world’

end

# chef-apply hello.rb

# ls

# vi motd -> change hello world to hello

# chef-apply hello.rb

# chef-apply hello.rb

1. **Delete motd**

# cat hello1.rb

file 'motd' do

action :delete

end

# chef-apply hello1.rb

1. **Apache2**
2. **Install and configure apache2**

root@node1:~/chef-repo# ls

hello1.rb hello.rb pkgins.rb

root@node1:~/chef-repo# cat pkgins.rb

package 'apache2' do

action :install

end

service 'apache2' do

action [:enable, :start]

end

file '/var/www/html/index.html' do

content '<html>

<body>

<h1>Hello World</h1>

</body>

</html>'

end

root@node1:~/chef-repo#

root@node1:~/chef-repo# chef-apply pkgins.rb

root@node1:~/chef-repo# Systemctl status apache2

root@node1:~/chef-repo# apt install curl

**Output**

**Option 1**

root@node1:~/chef-repo# curl localhost

Hello World

**Option 2**

open a browser and type -> <http://localhost>

Hello World

1. **Let’s modify the recipe**

root@node1:~/chef-repo# cat pkgins.rb

package 'apache2' do

action :install

end

service 'apache2' do

action [:enable, :start]

end

file '/var/www/html/index.html' do

content '<html>

<body>

<h1>Hello World!</h1>

</body>

</html>'

end

root@node1:~/chef-repo#

root@node1:~/chef-repo# chef-apply pkgins.rb

root@node1:~/chef-repo# chef-apply pkgins.rb

1. **Pass commands**
2. **Update ubuntu and install vim**

root@node1:~/chef-repo# cat aptvim.rb

execute "apt update" do

command "apt update"

end

apt\_package "vim" do

action :install

end

root@node1:~/chef-repo#

root@node1:~/chef-repo# chef-apply aptvim.rb

root@node1:~/chef-repo# chef-apply aptvim.rb

root@node1:~/chef-repo# vim file1

root@node1:~/chef-repo#

**Cookbooks**

**Prerequisites**

# cd chek-repo

# mkdir cook-books

# cd cook-books

# apt install tree

# chef generate cookbook learn\_chef\_apache2

# tree

root@node1:~/chef-repo/cookbooks# vim learn\_chef\_apache2/templates/index.html.erb

Hello from Chinna !

:wq

root@node1:~/chef-repo/cookbooks#

root@node1:~/chef-repo/cookbooks# vim learn\_chef\_apache2/recipes/default.rb

package ‘apache2’

service ‘apache2 do

action [:enable, :start]’

end

template ‘/var/www/html/index.html’ do

source ‘index.html.erb’

end

:wq

root@node1:~/chef-repo/cookbooks# cd ..

root@node1:~/chef-repo# chef-client --local-mode --runlist 'recipe[learn\_chef\_apache2]'

root@node1:~/chef-repo# curl localhost

**II Chef Server**

Configuration

<https://manage.chef.io/organizations/chinnajee>

or

<https://manage.chef.io/>

1. Either reviser or login if already have account.
2. Create a organization
3. Click administration-> select the organization Chinnajee -> click action the right -> select starter kit -> download

**In Workstation**

1. Put the kit in vbox share folder
2. Mount once again if not mounted using
   1. #mount -t vboxsf chef ~/winshare
3. # cd chef-repo
4. # apt install unzip
5. # unzip chef-starter.zip
6. # cd cookbooks
7. #ls
8. #cd ..

[https://supermarket.chef.io](https://supermarket.chef.io/) -> to download cook books

1. For test type postgres
2. Via cli go to work station and type
3. # knife cookbook site download learn\_chef\_apache2
4. # rm cookbooks/learn\_chef\_apache2
5. # tar -xvzf learn\_chef\_apache2-0.3.0.tar.gz -C cookbooks
6. # cd cookbooks
7. # tree learn\_chef\_apache2
8. # vim learn\_chef\_apache2/recipes/default.rb
9. # cd ..
10. # knife cookbook upload learn\_chef\_apache2
11. Goto -> <https://manage.chef.io/>
12. Go policy and check the uploaded cookbook

**In Client 1**

1. Open uchefclient vm
2. # hostnameclt set-hostname uchefclient1
3. # scp /etc/hosts root@uchefclient1:/etc
4. # apt update
5. # apt install -y openssh-server
6. Install starter kit by below steps
7. Put the kit in vbox share folder
8. Mount once again if not mounted using
   1. #mount -t vboxsf chef ~/winshare
9. # cd chef-repo
10. # apt install unzip
11. # unzip chef-starter.zip

**From Workstation**

1. # ping 192.168.56.102 // client 1
2. # knife bootstrap 192.168.56.102 --ssh-user user --ssh-password 'redhat' --sudo --use-sudo-password --node-name uchefclient1 --run-list 'recipe[learn\_chef\_apache2]'

**In Client1**

1. # systemctl status apache2
2. # curl localhost

**Optional steps**

**In Client 2**

1. Open uchefclient vm
2. # hostnameclt set-hostname uchefclient2
3. # scp root@uchefwork:/etc/hosts /etc
4. # apt update
5. # apt install -y openssh-server

**Install starter kit by below steps**

1. Put the kit in vbox share folder
2. Mount once again if not mounted using
   1. #mount -t vboxsf chef ~/winshare
3. # cd chef-repo
4. # apt install unzip
5. # unzip chef-starter.zip

**From Workstation**

1. # ping 192.168.56.103 // Client 2
2. # knife bootstrap 192.168.56.103 --ssh-user user --ssh-password 'redhat' --sudo --use-sudo-password --node-name uchefclient2 --run-list 'recipe[learn\_chef\_apache2]'

**In Client2**

1. # systemctl status apache2
2. # curl localhost

<https://www.youtube.com/watch?v=LTIjUJEehDA&list=PL5ukAVs2uoFBBLUih1njGiETSp1osFu4f>