***Cook Book Upload and Nodes Bootstrapping***

**Cook book Upload to Chef Server from Workstation**

1. Create a cookbooks directory in your working directory in workstation (~/learn-chef)

mkdir ~/learn-chef/cookbooks

1. Clone the httpd cookbooks from git

cd ~/learn-chef/cookbooks

git clone https://github.com/deepak2717/learn\_chef\_httpd.git

1. Upload cookbook learn\_chef\_httpd to Chef Server and list the policy using knife

knife cookbook upload learn\_chef\_httpd

knife cookbook list

1. Login to the Chef Server and see the uploaded cookbook in the policy. Select the cookbook listed. Check the files that you have uploaded to the server

**Boot Strapping and executing the Run List**

1. In Chef : copy the “pem” file to ~/.ssh/ directory from your local machine.
2. cd ~/learn-chef/
3. knife bootstrap 35.153.202.128 --ssh-user ec2-user --sudo --identity-file ~/.ssh/myec2.pem --node-name node1-amazonlinux --run-list 'recipe[learn\_chef\_httpd]'

[note:give the ip of new instance created,change pem file name]

Goto:cookbooks and then run the above command

oR

knife bootstrap <ip of node> -x <username of Node> -P <password of node> --sudo -N <hostname of node>

1. knife node list
2. knife node show node1-amazonlinux
3. Check boot strapping is implemented successfully : <http://35.153.202.128/>

Update your Nodes Configuration

1. Add template code to your HTML

vim learn-chef/cookbooks/learn\_chef\_httpd/templates/index.html.erb

<html>

<body>

<h1>hello from <%= node['fqdn'] %></h1>

</body>

</html>

1. Update your cookbooks metdata version

vim learn-chef/cookbooks/learn\_chef\_httpd/metadata.rb

change - version '0.1.0' to version '0.2.0'

1. Upload the changed cookbook to Chef Server

ubuntu@ip-172-31-93-236:~$ cd learn-chef/

ubuntu@ip-172-31-93-236:~/learn-chef$ knife cookbook upload learn\_chef\_httpd

Uploading learn\_chef\_httpd [0.2.0]

Uploaded 1 cookbook.

1. Refresh the node using chef-client from the node using the workstation

ubuntu@ip-172-31-93-236:~/learn-chef$ knife ssh 'name:node1-amazonlinux' 'sudo chef-client' --ssh-user ec2-user --ssh-identity-file ~/.ssh/myec2.pem --attribute ipaddress

172.31.47.66 Starting Chef Client, version 14.3.37

172.31.47.66 resolving cookbooks for run list: ["learn\_chef\_httpd"]

172.31.47.66 Synchronizing Cookbooks:

172.31.47.66 - learn\_chef\_httpd (0.2.0)

172.31.47.66 Installing Cookbook Gems:

172.31.47.66 Compiling Cookbooks...

172.31.47.66 Converging 3 resources

172.31.47.66 Recipe: learn\_chef\_httpd::default

172.31.47.66 \* yum\_package[httpd] action install (up to date)

172.31.47.66 \* service[httpd] action enable (up to date)

172.31.47.66 \* service[httpd] action start (up to date)

172.31.47.66 \* template[/var/www/html/index.html] action create

172.31.47.66 - update content in file /var/www/html/index.html from ef4ffd to b694a9

172.31.47.66 --- /var/www/html/index.html 2018-07-27 17:40:00.025539665 +0000

172.31.47.66 +++ /var/www/html/.chef-index20180727-1206-pxzmk1.html 2018-07-27 19:05:32.823822970 +0000

172.31.47.66 @@ -1,6 +1,6 @@

172.31.47.66 <html>

172.31.47.66 <body>

172.31.47.66 - <h1>hello world</h1>

172.31.47.66 + <h1>hello from ip-172-31-47-66.ec2.internal</h1>

172.31.47.66 </body>

172.31.47.66 </html>

172.31.47.66 - restore selinux security context

172.31.47.66

172.31.47.66 Running handlers:

172.31.47.66 Running handlers complete

172.31.47.66 Chef Client finished, 1/4 resources updated in 04 seconds