Steps for deploying the production servers:-

Step1:- First and foremost thing is we need to create a one organization in chef-server.

1. Go to chef-server GUI and go to administration and then you can create organization name whatever the name you want. For example I created my organization name as silicus.
2. Now you need to download the starter kit of that organization from gui.

Caution:- If someone already downloaded the starter kit then each and every devops member should use the same starter kit. Don’t download it again. This is very important step you should consider while downloading the starter kit. For now I already downloaded the starter kit please do not download it again.

3). so now you have starter kit of that organization.

4). Create one new folder and keep this downloaded starter kit and unzip the starter kit in that folder. Whenever you want to execute any chef commands you need to go to that directory and execute the knife commands.

Step1 is done;

Check :- run the command from the chef-repo folder

Knife node list

It does’t show any node name but the command should execute successfully. That means your workstation is successfully communicating with chef-server.

How to bootstrap a node with password less ssh:-

1). The first thing is you need to add your ssh key to the production server.

i) first you need to go to the cd ~/.ssh

ii) if you list in that directory you will find the ssh keys. You need to add your id\_rsa.pub to the production server in side authorized keys.

iii) if we have 100’s of production servers then ansible or shell script is the best way to add the ssh keys to the target server.

Testing:- Now if you run this command you need to login to the production server without asking the password.

Ssh user@IPAddress

User = in whom user you added the ssh key

IPAddress = IPAdderess of that production server.

Bootstraping Production Server:-

In general we basically bootstrap with fully qualified domain name. But for production server we can go head with public IPAddress as well. They wont stop that server.

Write a shell script that contain each and every node information like ipaddress, user , and node name of the production server.

I am giving one example how to bootstrap one node.

Sudo knife bootstrap 1.1.1.1 –ssh-user rajesh –I ~/.ssh/id\_rsa –sudo –node-name ‘testing-server1’

* + - 1. -🡪 replace with production IPAddress

rajesh -🡪 replace with user name of the node

testing-server1-🡪 replace with whatever you want your node name.

Now you will successfully bootstrap with chef-server.

How to add recipe to the servers:-

Write a shell script with following data:

#!/bin/bash.  
  
recipe\_name=$1  
  
#recipe\_name=security  
  
recipe\_name=allpatch

#recipe\_name=critical  
  
  
  
#Get the node list and create node\_list.txt file.  
  
knife node list > node\_list.txt  
  
  
#Excute for loop to remove recipes from multiple node.  
  
for i in `cat node\_list.txt`; do knife node run\_list add $i recipe[patching::$recipe\_name] ; done

This for adding allpatch recipe to all nodes in that organization.

How to run chef-client run on production server:-

This is little bit tricky, you need to create a shell script that containes all nodes data just like adding nodes to the chef-server.I am showing how to run chef-client run on the one nod. Similarly you can add all the nodes

Knife ssh 1.1.1.1 ‘sudo chef-client’ –manual-list –ssh-user rajesh –I ~/.ssh/id\_rsa

The same way you need add all the nodes in our organization.

How to delete the recipe form the nodes list:-

#!/bin/bash  
  
  
#This script is use to remove recipe from multiple node.  
  
  
#Enter the recipe name which need to remove.  
  
recipe\_name=$1  
  
#recipe\_name=security  
  
recipe\_name=allpatch  
  
#recipe\_name=critical  
  
  
#get the node list and create node\_list.txt file.  
  
knife node list > node\_list.txt  
  
  
#Excute for loop to remove recipes from multiple node.  
  
for i in `cat node\_list.txt`; do knife node run\_list remove $i recipe[patching::$recipe\_name] ; done

This for removing allpatch recipe from the all the nodes.

How to manage multiple organizations in side chef-server:-

If I want to manage multiple organizations in my chef-server I wil just create new organization in chef-server gui.

And I will download that organization starter kit and I will kept in new folder,

Whenever I want to do os patching in that organization I will go to that folder and execute knife commands.

Note:- Each organization will have different starter kit. So in that way we will connect to that organizations.