STEPS TO INSTALL/CONFIGURE KATELLO

SERVER SIDE CONFIGURATION

1. First we need to execute all commands as root. For that we will use "**sudo su"** to execute commands with root privileges.

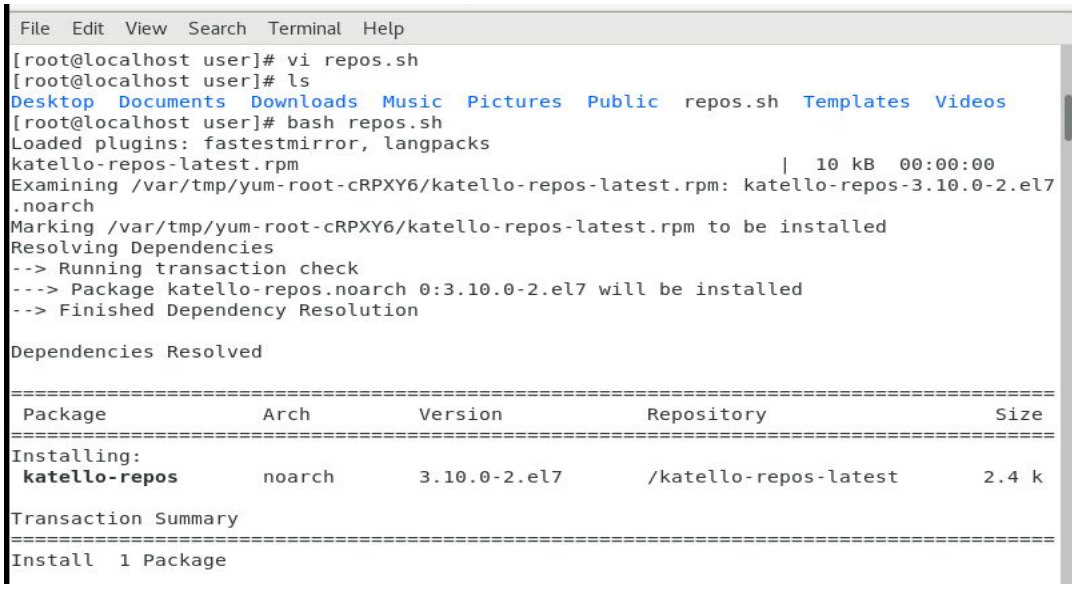
2. Now create a **repos.sh** file with the following commands to include the repositories required for Katello:

```
yum -y localinstall http://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
yum -y localinstall
http://yum.theforeman.org/releases/1.20/el7/x86_64/foreman-release.rpm
yum -y localinstall http://yum.puppetlabs.com/puppetlabs-release-pc1-el-7.noarch.rpm
yum -y localinstall
http://fedorapeople.org/groups/katello/releases/yum/3.10/katello/el7/x86_64/katello-repos-latest.rpm
yum -y install foreman-release-scl python2-django
```

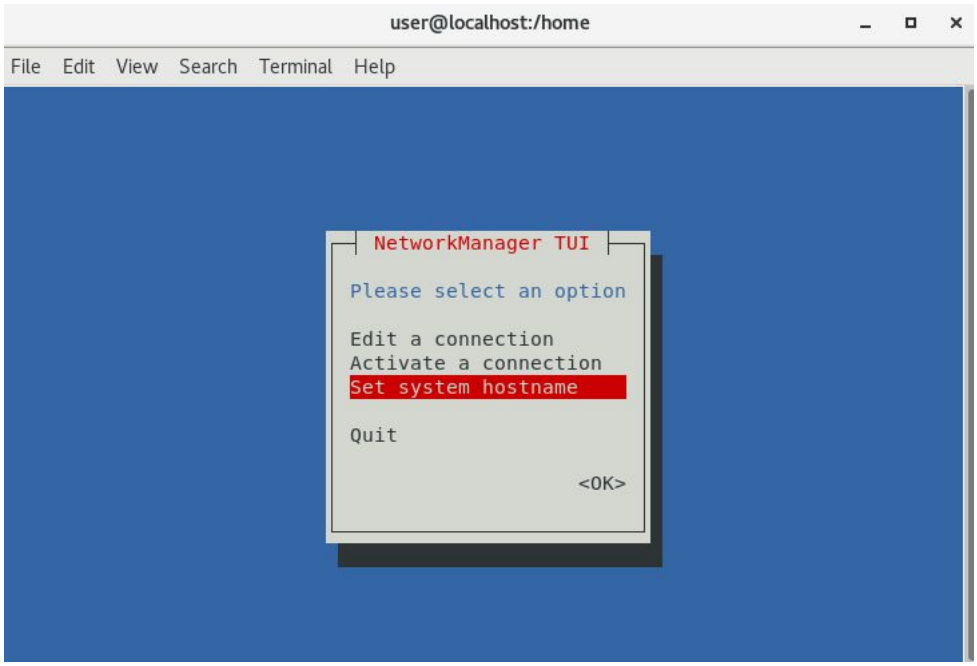
3. Execute the shell file using :
   bash <filename.sh>

   For example –

   bash repos.sh



4. Now set a hostname for your host machine by typing **nmtui** and editing the hostname. Here we have given the hostname as – **katello.server.com**



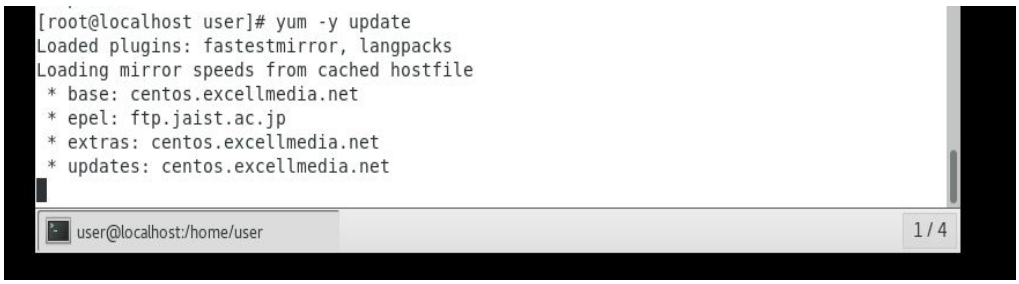
Now we refresh the CLI using the command – **bash**

5. Now we need to add this hostname to our **/etc/hosts** file.To do this we will use the command:
echo "<server ip> <fqdn> <sub-domain>" >> /etc/hosts
For example:-

```
echo "192.168.9.10 katello.server.com katello" >> /etc/hosts
```

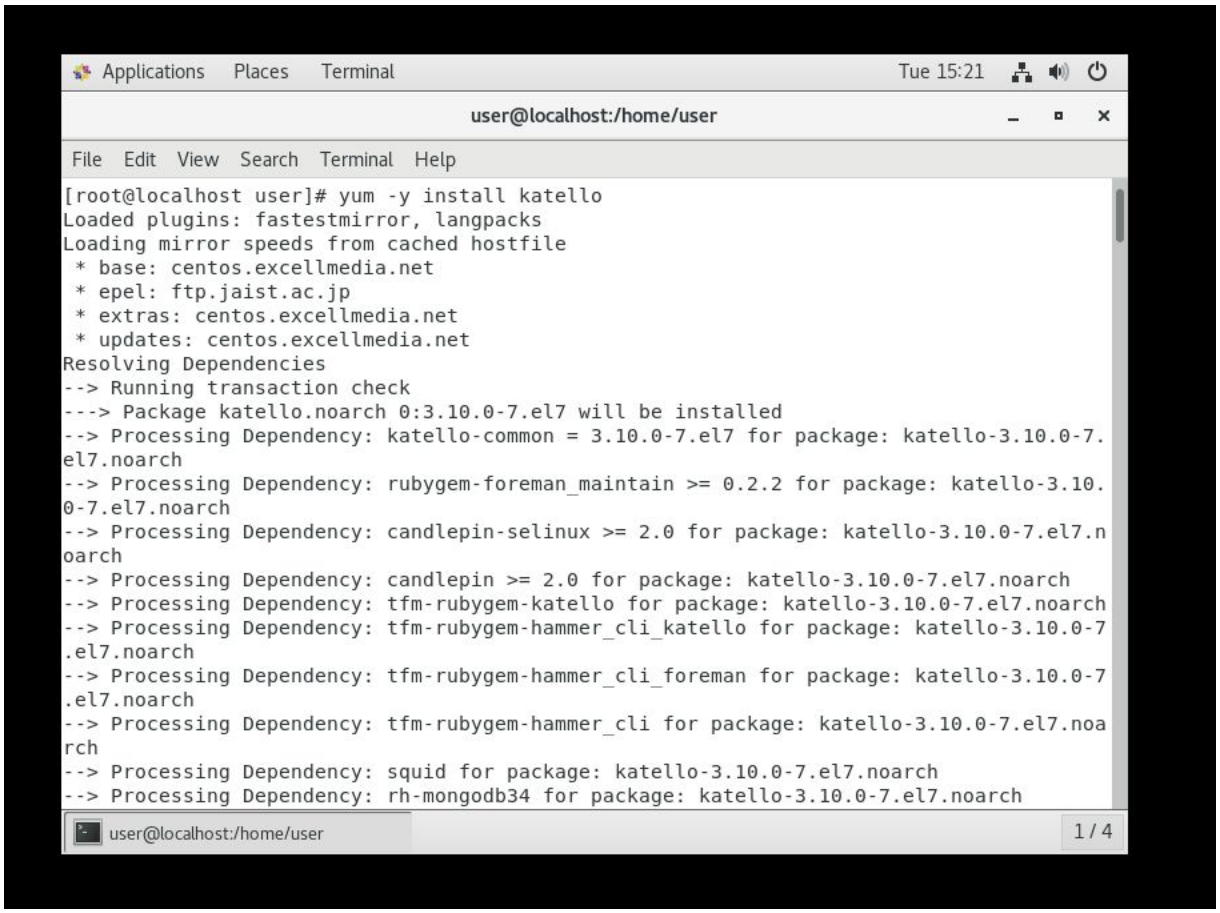
6. After setting up the appropriate repositories and changing the hostname, update your packages:

```
yum –y update
```



7. Then install Katello:

```
yum –y install katello
```



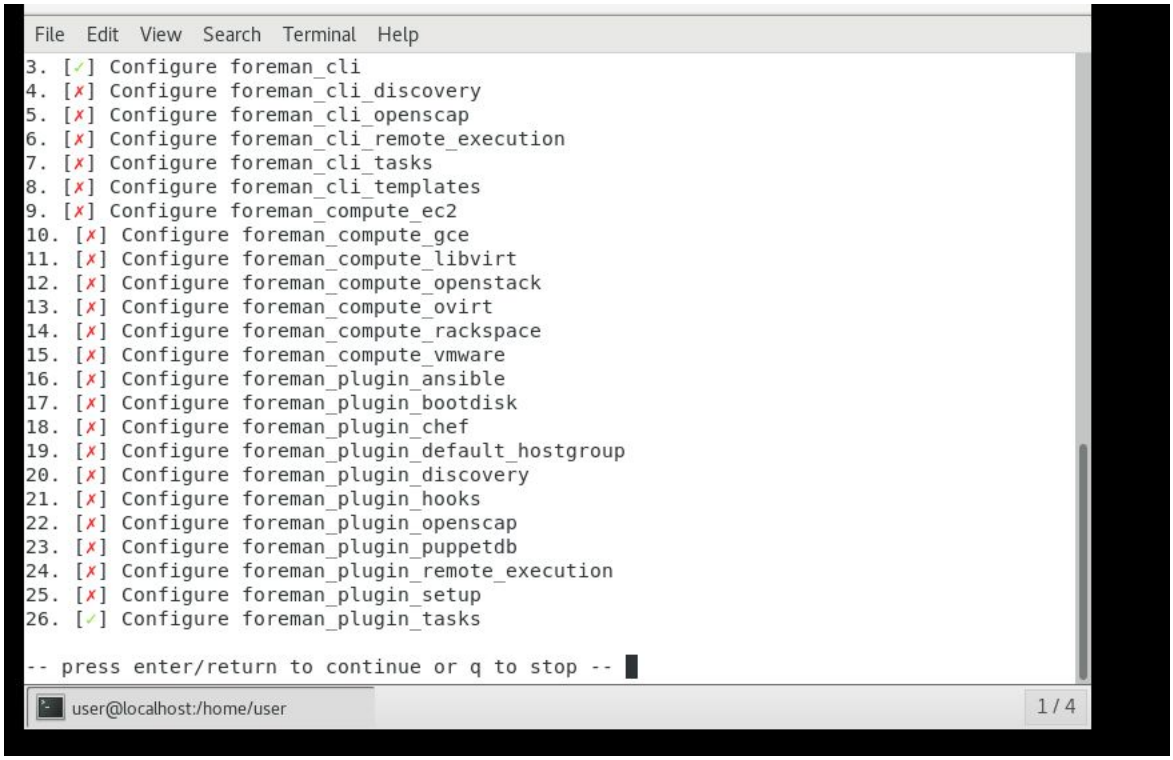
8. Now we shall use foreman-installer to setup Katello:

```
foreman-installer --scenario katello
```

After the installation is completed , we'll get an output which'll look something like this

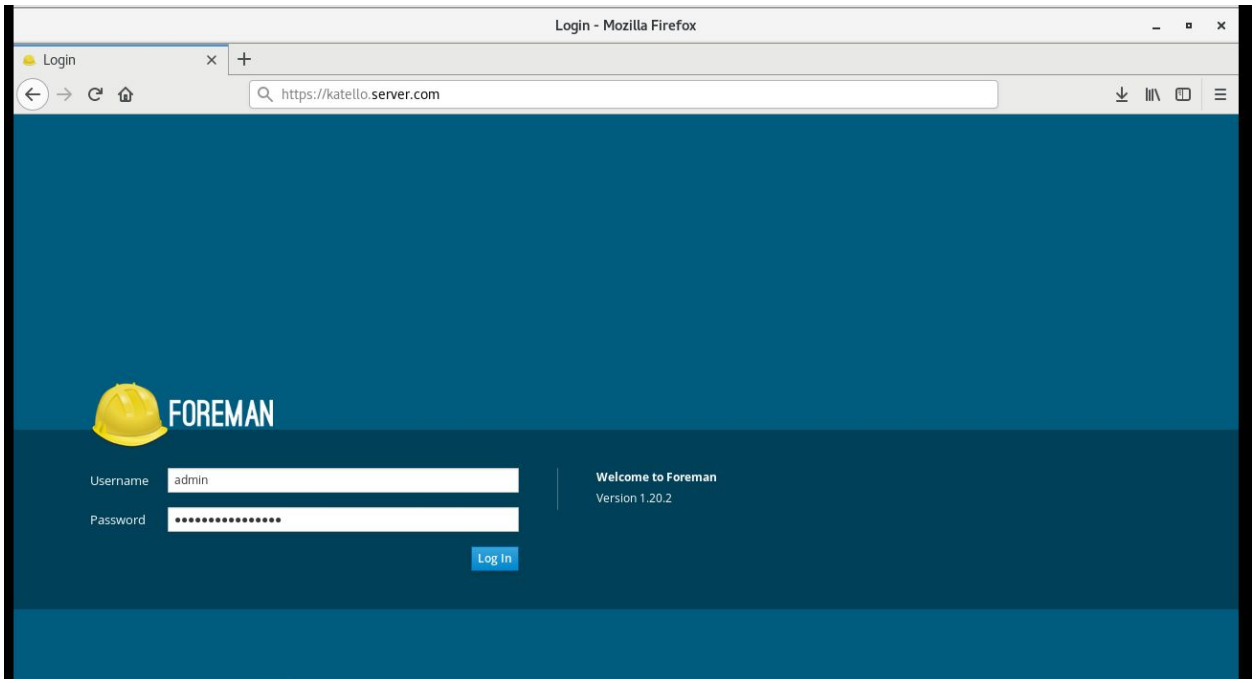
9. Now we need to configure certain settings in foreman for which we shall use the ' -i ' argument(for interactive mode) with the **foreman-installer** command.

```
foreman-installer -i
```



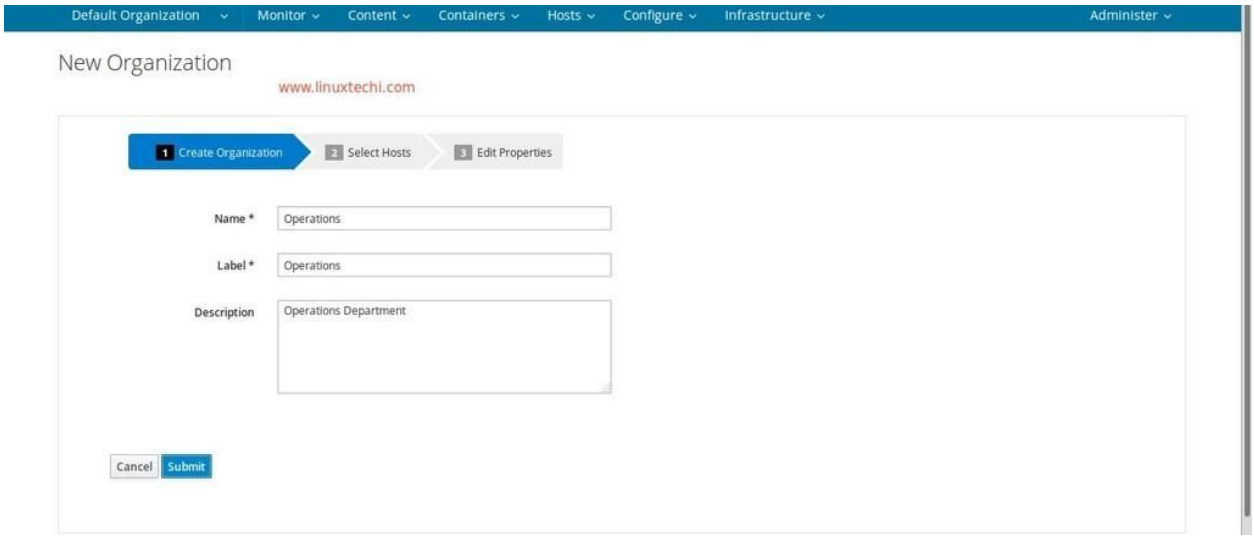
Here we need to enable certain configurations which are : **4,6,7,8,15,16,17,41**

10. Now to access the Katello dashboard, we need to open our browser and visit the url which we chose as our hostname which is: **https://katello.server.com**



Use the user/pass provided when we installed Katello using the foreman-installer.

11. Login and choose the tab called “Default Organization” and click on Manage Organizations. Once there, choose to create a new organization. Here we will name our organization as “Operations”.

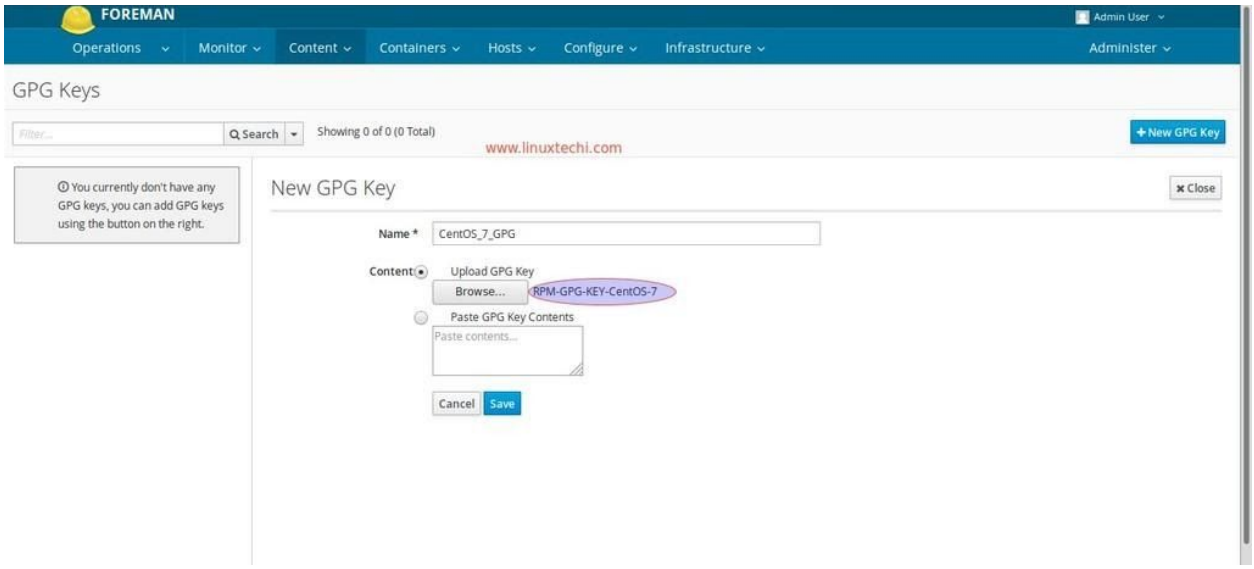


Click on Submit. In the next Window click on the ‘**Proceed to Edit**‘ option as this point of time we don’t have any hosts. Finally click on **Submit** on the next window.
Now onward whatever we do in dashboard first make sure we are using ‘**Operations**‘ Organization. So Go to Organization Tab and Select ‘**Operations**‘

12. Let’s first create the GPG keys for CentOS 7 yum repositories. For that we need to download the key using the command:

```
wget http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-7
```

Now in the dashboard , go to **Content -> Content Credentials -> Create Content Credentials**. Specify the Key Name, in my case I’m putting it as ‘**RPM-GPG-KEY-CentOS-7**‘ and then upload the above downloaded CentOS 7 RPM key.



13. **Now here is a step-by-step plan that we'll be performing with a single script**

- *Step 1: create a product.*
- *Step 2: create RPM repositories.*
- *Step 3: sync RPM repositories.*
- *Step 4: create a content view.*
- *Step 5: add repositories to the content view.*
- *Step 6: create a lifecycle environment.*
- *Step 7: publish a content view.*
- *Step 8: promote the content view version to lifecycle environment.*
- *Step 9: create an activation key.*
- *Step 10: add subscription to the activation key.*

To do this , create a file called **configs.sh** and copy the following commands onto it:

```
#TO CREATE A PRODUCT
hammer product create   --name "el7_repos"   --description "Various repositories to use with CentOS 7" --organization "Operations"
#TO ADD CENTOS 7 BASE REPO
hammer repository create   --product "el7_repos"   --name "base_x86_64 "   --label "base_x86_64 "   --content-type "yum"   --download-policy "on_demand"   --gpg-key "RPM-GPG-KEY-CentOS-7"   --url "http://mirror.centos.org/centos/7/os/x86_64/" --mirror-on-sync "no" --organization "Operations"
#TO ADD CENTOS 7 EXTRA REPOS
hammer repository create   --product "el7_repos"   --name "extras_x86_64"   --label "extras_x86_64"   --content-type "yum"   --download-policy "on_demand" --gpg-key "RPM-GPG-KEY-CentOS-7"   --url "http://mirror.centos.org/centos/7/extras/x86_64/" --mirror-on-sync "no" --organization "Operations"
#TO SYNC FIRST 2 REPOS
for i in $(seq 1 2); do hammer repository synchronize --product "el7_repos" --id "$i"; done
#CREATE A CONTENT VIEW WITH BOTH THE REPOS
hammer content-view create --name "el7_content" --description "Content view for CentOS 7" --organization "Operations"
hammer content-view add-repository --name "el7_content" --product "el7_repos" --organization "Operations" --repository-id "1";
hammer content-view add-repository --name "el7_content" --product "el7_repos" --organization "Operations" --repository-id "2";
# CREATE A LIFECYCLE ENVIRONMENT CALLED "STABLE"
hammer lifecycle-environment create --name "stable" --label "stable" --prior "Library" --organization "Operations"
# WE NEED TO PUBLISHED A CONTENT VIEW IN ORDER TO LOCK ITS CONTENT (RPM REPOSITORIES) IN PLACE
hammer content-view publish --name "el7_content" --organization "Operations" --description "Publishing repositories"
# PROMOTE VERSION TO LIFECYCLE ENVIRONMENT
```

```
hammer content-view version promote --content-view "el7_content" --organization "Operations" --version "1.0" --to-lifecycle-environment "stable" --force
# CREATE AN ACTIVATION KEY CALLED “EL7-KEY”
hammer activation-key create --name "el7-key" --description "Key to use with CentOS7" --lifecycle-environment "stable" --content-view "el7_content" --unlimited-hosts --organization "Operations"
# ADD SUBSCRIPTION TO ACTIVATION KEY
hammer activation-key add-subscription --name "el7-key" --organization "Operations" --quantity "1" --subscription-id "1"
#SCRIPT OVER
```

Now execute the configs.sh using: **bash configs.sh**

Now we are done with the host side configurations and will now move on to the client.

CLIENT SIDE CONFIGURATION

1. First we need to install subscription-manager on the client. For that we’ll use

```
yum install subscription-manager
```

2. Now we need to add the katello server’s hostname to our **/etc/hosts** file. To do this we will use the command:
echo “<server ip> <fqdn> <subdomain>” >> /etc/hosts

   For example:-

```
echo “192.168.9.15 katello.server.com katello” >> /etc/hosts
```

3. Now install the katello server certificate in our client system.
yum -y install http://<IP>/pub/katello-ca-consumer-<fqdn>-1.0-1.noarch.rpm
eg:-

```
yum -y install http://192.168.132.130/pub/katello-ca-consumer-katello.server.com-1.0-1.noarch.rpm
```

4. To connect to the client, we will use subscriber agent along with the activation key and organization

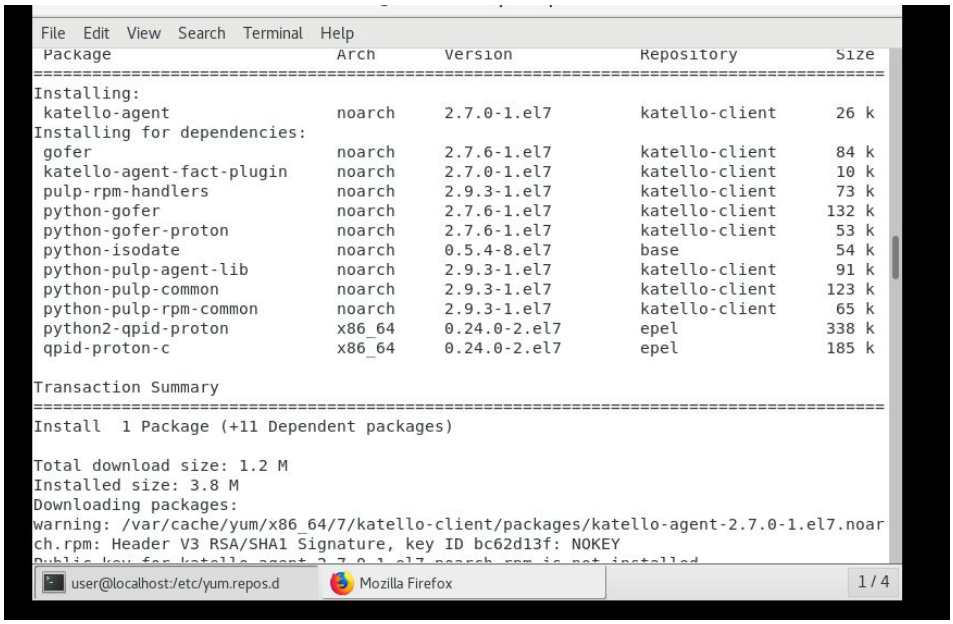
```
subscription-manager register --org="Operations" --activationkey="el7-key"
```

After successful registration, we'll get an output similar to this:

```
The system has been registered with ID:
7c0a6c2f-96f8-41b6-85e2-9765e0ec6ddf
No products installed.
```

5. To install Katello agent on this client, we need to add certain repositories and then install the agent. Create a file called **katelloagent.sh** and copy the following in it and execute it:

```
yum -y install
http://fedorapeople.org/groups/katello/releases/yum/3.2/client/el7/x86_64
/katello-client-repos-latest.rpm
yum -y install
http://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
yum -y install katello-agent
```



6. Start the Katello agent service and enable it to start at the system boot using the commands:

```
systemctl start goferd
 systemctl enable goferd
```

7. Remove or move default CentOS 7 and katello-agent repository to other location except redhat.repo , which are present inside **/etc/yum.repos.d/**
To do this use the following commands:

```
cd /etc/yum.repos.d/
mkdir old
mv CentOS-* epel*  katello* old/
```

SERVER SIDE VERIFICATION

Now verify whether the Katello agent is installed on the Host from the Satellite dashboard.
Hosts –> Content Hosts –> Select Host –> check the Katello Agent parameter

To install a package, go to **Hosts** –> **Content Hosts** –> **Select Host** –> **Packages**

Choose Package Action as "**Package Remove**" or "**Package Install**" and then type the name of a package; then click on perform.

Thus we are done with configuring Foreman/Katello successfully.