[xcat@master ~]$ su -

Password:

Last login: Fri Jun 2 16:02:05 IST 2023 on pts/0

[root@local~]#hostnamectl set-hostname master

[root@master ~]#systemctl stop firewalld

[root@master ~]#systemctl disable firewalld

[root@master ~]#vi /etc/selinux/config

{selinux=disabled}

[root@master ~]#init 6

[root@master ~]#nmtui

[root@master ~]#ip a

[root@master ~]# yum -y install yum-utils

[root@master ~]# yum install epel-release

[root@master ~]# wget -P /etc/yum.repos.d <https://xcat.org/files/xcat/repos/yum/latest/xcat-core/xcat-core.repo> --no-check-certificate

[root@master ~]# wget -P /etc/yum.repos.d <https://xcat.org/files/xcat/repos/yum/xcat-dep/rh7/x86_64/xcat-dep.repo> --no-check-certificate

[root@master ~]# cd /etc/profile.d/

[root@master profile.d]# ls

256term.csh colorgrep.sh flatpak.sh PackageKit.sh which2.csh

256term.sh colorls.csh lang.csh sh.local which2.sh

abrt-console-notification.sh colorls.sh lang.sh vim.csh xcat.csh

bash\_completion.sh congo.sh less.csh vim.sh xcat.sh

colorgrep.csh csh.local less.sh vte.sh

[root@master profile.d]# cat xcat.sh

XCATROOT=/opt/xcat

PATH=$XCATROOT/bin:$XCATROOT/sbin:$XCATROOT/share/xcat/tools:$PATH

MANPATH=$XCATROOT/share/man:$MANPATH

export XCATROOT PATH MANPATH

export PERL\_BADLANG=0

# If /usr/local/share/perl5 is not already in @INC, add it to PERL5LIB

perl -e "print \"@INC\"" | egrep "(^|\W)/usr/local/share/perl5($| )" > /dev/null

if [ $? = 1 ]; then

export PERL5LIB=/usr/local/share/perl5:$PERL5LIB

fi

[root@master profile.d]# source xcat.sh

[root@master profile.d]# lsdef

Could not find any object definitions to display.

[root@master profile.d]# tabdump site

[root@master profile.d]# cd

[root@master ~]# lsdef

Could not find any object definitions to display.

[root@master ~]# lsxcatd -v

Version 2.16.5 (git commit b588632f2fa62f34e658f2f0b1d12ad07201f981, built Fri Mar 3 09:07:13 EST 2023)

[root@master ~]# tabdump site

#key,value,comments,disable

"blademaxp","64",,

"fsptimeout","0",,

"installdir","/install",,

"ipmimaxp","64",,

"ipmiretries","3",,

"ipmitimeout","2",,

"consoleondemand","no",,

"master","10.10.10.2",,

"forwarders","192.168.15.2",,

"nameservers","10.10.10.2",,

"maxssh","8",,

"ppcmaxp","64",,

"ppcretry","3",,

"ppctimeout","0",,

"powerinterval","0",,

"syspowerinterval","0",,

"sharedtftp","1",,

"SNsyncfiledir","/var/xcat/syncfiles",,

"nodesyncfiledir","/var/xcat/node/syncfiles",,

"tftpdir","/tftpboot",,

"xcatdport","3001",,

"xcatiport","3002",,

"xcatconfdir","/etc/xcat",,

"timezone","Asia/Calcutta",,

"useNmapfromMN","no",,

"enableASMI","no",,

"db2installloc","/mntdb2",,

"databaseloc","/var/lib",,

"sshbetweennodes","ALLGROUPS",,

"dnshandler","ddns",,

"vsftp","n",,

"cleanupxcatpost","no",,

"cleanupdiskfullxcatpost","no",,

"dhcplease","43200",,

"auditnosyslog","0",,

"auditskipcmds","ALL",,

[root@master ~]# cat /etc/profile.d/xcat.sh

XCATROOT=/opt/xcat

PATH=$XCATROOT/bin:$XCATROOT/sbin:$XCATROOT/share/xcat/tools:$PATH

MANPATH=$XCATROOT/share/man:$MANPATH

export XCATROOT PATH MANPATH

export PERL\_BADLANG=0

# If /usr/local/share/perl5 is not already in @INC, add it to PERL5LIB

perl -e "print \"@INC\"" | egrep "(^|\W)/usr/local/share/perl5($| )" > /dev/null

if [ $? = 1 ]; then

export PERL5LIB=/usr/local/share/perl5:$PERL5LIB

fi

[root@master ~]# ip a

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:f5 brd ff:ff:ff:ff:ff:ff

inet 192.168.15.129/24 brd 192.168.15.255 scope global noprefixroute dynamic ens33

valid\_lft 1305sec preferred\_lft 1305sec

inet6 fe80::8112:3373:6815:a4d4/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

3: ens34: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:ff brd ff:ff:ff:ff:ff:ff

4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0

valid\_lft forever preferred\_lft forever

5: virbr0-nic: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo\_fast master virbr0 state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

[root@master ~]# chdef -t site dhcpinterfaces=ens34

1 object definitions have been created or modified.

[root@master ~]# tabdump site | grep dhcp

"dhcplease","43200",,

"dhcpinterfaces","ens34",,

[root@master ~]# lsblk

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

sda 8:0 0 40G 0 disk

├─sda1 8:1 0 1G 0 part /boot

└─sda2 8:2 0 39G 0 part

├─centos-root 253:0 0 35.1G 0 lvm /

└─centos-swap 253:1 0 3.9G 0 lvm [SWAP]

sr0 11:0 1 4.4G 0 rom /run/media/xcat/CentOS 7 x86\_64

[root@master ~]# dd if=/dev/sr0 of=centos.iso

9203712+0 records in

9203712+0 records out

4712300544 bytes (4.7 GB) copied, 77.0271 s, 61.2 MB/s

[root@master ~]# ls

anaconda-ks.cfg centos.iso index.html initial-setup-ks.cfg

[root@master ~]# lsdef -t osimage

Could not find any object definitions to display.

[root@master ~]# copycds centos.iso

Copying media to /install/centos7.9/x86\_64

Media copy operation successful

[root@master ~]# lsdef -t osimage

centos7.9-x86\_64-install-compute (osimage)

centos7.9-x86\_64-netboot-compute (osimage)

centos7.9-x86\_64-statelite-compute (osimage)

[root@master ~]# cd /install/centos7.9/x86\_64/

[root@master x86\_64]# ls

CentOS\_BuildTag EFI EULA GPL images isolinux LiveOS Packages repodata RPM-GPG-KEY-CentOS-7 RPM-GPG-KEY-CentOS-Testing-7 TRANS.TBL

[root@master x86\_64]# cd

[root@master ~]# lsdef -t osimage

centos7.9-x86\_64-install-compute (osimage)

centos7.9-x86\_64-netboot-compute (osimage)

centos7.9-x86\_64-statelite-compute (osimage)

[root@master ~]# cd /install/centos7.9/x86\_64/

[root@master x86\_64]# genimage centos7.9-x86\_64-netboot-compute

[root@master x86\_64]# df -TH

[root@master x86\_64]# cd /install/netboot/centos7.9/x86\_64/compute/

[root@master compute]# ls

initrd-stateless.gz initrd-statelite.gz kernel rootimg

[root@master compute]# cd rootimg/

[root@master rootimg]# ls

bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var

[root@master rootimg]# cd

[root@master ~]# mkdir -p /install/custom/netboot

[root@master ~]# chdef -t osimage -o centos7.9-x86\_64-netboot-compute synclists="/install/custom/netboot/compute.synclist"

1 object definitions have been created or modified.

[root@master ~]# echo "/etc/passwd -> /etc/passwd" > /install/custom/netboot/compute.synclist

[root@master ~]# echo "/etc/group -> /etc/group" >> /install/custom/netboot/compute.synclist

[root@master ~]# echo "/etc/shadow -> /etc/shadow" >> /install/custom/netboot/compute.synclist

[root@master ~]# cat /install/custom/netboot/compute.synclist

/etc/passwd -> /etc/passwd

/etc/group -> /etc/group

/etc/shadow -> /etc/shadow

[root@master ~]# lsdef -t osimage

centos7.9-x86\_64-install-compute (osimage)

centos7.9-x86\_64-netboot-compute (osimage)

centos7.9-x86\_64-statelite-compute (osimage)

[root@master ~]# packimage centos7.9-x86\_64-netboot-compute

Packing contents of /install/netboot/centos7.9/x86\_64/compute/rootimg

archive method:cpio

compress method:gzip

[root@master ~]# mkdef -t node xcat-node1 groups=compute,all ip=10.10.10.3 mac=00:0C:29:DB:D6:11 netboot=xnba

1 object definitions have been created or modified.

[root@master ~]# lsdef xcat-node1

Object name: xcat-node1

groups=compute,all

ip=10.10.10.3

mac=00:0C:29:DB:D6:11

netboot=xnba

postbootscripts=otherpkgs

postscripts=syslog,remoteshell,syncfiles

[root@master ~]# chdef -t site domain=cdac.in

1 object definitions have been created or modified.

[root@master ~]# tabdump site | grep domain

"domain","cdac.in",,

[root@master ~]# cat /etc/hosts

127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4

::1 localhost localhost.localdomain localhost6 localhost6.localdomain6

10.10.10.2 master

[root@master ~]# makehosts

[root@master ~]# cat /etc/hosts

127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4

::1 localhost localhost.localdomain localhost6 localhost6.localdomain6

10.10.10.2 master

10.10.10.3 xcat-node1 xcat-node1.cdac.in

[root@master ~]# vim /etc/hosts

[root@master ~]# cat /etc/hosts

127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4

::1 localhost localhost.localdomain localhost6 localhost6.localdomain6

10.10.10.2 master master.cdac.in

10.10.10.3 xcat-node1 xcat-node1.cdac.in

[root@master ~]# makenetworks

Warning: [master]: The network entry '192\_168\_15\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_15\_0-255\_255\_255\_0'

Warning: [master]: The network entry '192\_168\_122\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_122\_0-255\_255\_255\_0'

[root@master ~]# makedhcp -n

Renamed existing dhcp configuration file to /etc/dhcp/dhcpd.conf.xcatbak

The dhcp server must be restarted for OMAPI function to work

[root@master ~]# cat /etc/dhcp/dhcpd.conf

#xCAT generated dhcp configuration

option conf-file code 209 = text;

option space isan;

option isan-encap-opts code 43 = encapsulate isan;

option isan.iqn code 203 = string;

option isan.root-path code 201 = string;

option space gpxe;

option gpxe-encap-opts code 175 = encapsulate gpxe;

option gpxe.bus-id code 177 = string;

option user-class-identifier code 77 = string;

option gpxe.no-pxedhcp code 176 = unsigned integer 8;

option tcode code 101 = text;

option iscsi-initiator-iqn code 203 = string;

ddns-update-style interim;

ignore client-updates;

option client-architecture code 93 = unsigned integer 16;

option tcode "Asia/Calcutta";

option gpxe.no-pxedhcp 1;

option www-server code 114 = string;

option cumulus-provision-url code 239 = text;

omapi-port 7911;

key xcat\_key {

algorithm hmac-md5;

secret "ZGEwNDZTTFo1V0dsS05pc0dPOTN2ZlhROWJxeXc5ZUs=";

};

omapi-key xcat\_key;

class "pxe" {

match if substring (option vendor-class-identifier, 0, 9) = "PXEClient";

ddns-updates off;

max-lease-time 600;

}

[root@master ~]# makedhcp -n

Renamed existing dhcp configuration file to /etc/dhcp/dhcpd.conf.xcatbak

[root@master ~]# vim /etc/dhcp/dhcpd.conf

dhcpd.conf dhcpd.conf.xcatbak

[root@master ~]# vim /etc/dhcp/dhcpd.conf

[root@master ~]# tabdump site

#key,value,comments,disable

"blademaxp","64",,

"fsptimeout","0",,

"installdir","/install",,

"ipmimaxp","64",,

"ipmiretries","3",,

"ipmitimeout","2",,

"consoleondemand","no",,

"master","10.10.10.2",,

"forwarders","192.168.15.2",,

"nameservers","10.10.10.2",,

"maxssh","8",,

"ppcmaxp","64",,

"ppcretry","3",,

"ppctimeout","0",,

"powerinterval","0",,

"syspowerinterval","0",,

"sharedtftp","1",,

"SNsyncfiledir","/var/xcat/syncfiles",,

"nodesyncfiledir","/var/xcat/node/syncfiles",,

"tftpdir","/tftpboot",,

"xcatdport","3001",,

"xcatiport","3002",,

"xcatconfdir","/etc/xcat",,

"timezone","Asia/Calcutta",,

"useNmapfromMN","no",,

"enableASMI","no",,

"db2installloc","/mntdb2",,

"databaseloc","/var/lib",,

"sshbetweennodes","ALLGROUPS",,

"dnshandler","ddns",,

"vsftp","n",,

"cleanupxcatpost","no",,

"cleanupdiskfullxcatpost","no",,

"dhcplease","43200",,

"auditnosyslog","0",,

"auditskipcmds","ALL",,

"dhcpinterfaces","ens34",,

"domain","cdac.in",,

[root@master ~]# makenetworks

Warning: [master]: The network entry '192\_168\_15\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_15\_0-255\_255\_255\_0'

Warning: [master]: The network entry '192\_168\_122\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_122\_0-255\_255\_255\_0'

[root@master ~]# makedhcp -n

Renamed existing dhcp configuration file to /etc/dhcp/dhcpd.conf.xcatbak

[root@master ~]# makedhcp -a

Error: [master]: dhcp server is not running. please start the dhcp server.

[root@master ~]# systemctl status dhcpd

dhcpd6.service dhcpd.service

[root@master ~]# systemctl status dhcpd

● dhcpd.service - DHCPv4 Server Daemon

Loaded: loaded (/usr/lib/systemd/system/dhcpd.service; enabled; vendor preset: disabled)

Active: failed (Result: exit-code) since Fri 2023-06-02 19:07:43 IST; 12s ago

Docs: man:dhcpd(8)

man:dhcpd.conf(5)

Process: 96559 ExecStart=/usr/sbin/dhcpd -f -cf /etc/dhcp/dhcpd.conf -user dhcpd -group dhcpd --no-pid (code=exited, status=1/FAILURE)

Main PID: 96559 (code=exited, status=1/FAILURE)

Jun 02 19:07:43 master dhcpd[96559]: Wrote 0 class decls to leases file.

Jun 02 19:07:43 master dhcpd[96559]: Wrote 0 leases to leases file.

Jun 02 19:07:43 master dhcpd[96559]:

Jun 02 19:07:43 master dhcpd[96559]: No subnet declaration for virbr0 (192.168.122.1).

Jun 02 19:07:43 master dhcpd[96559]: \*\* Ignoring requests on virbr0. If this is not what

Jun 02 19:07:43 master dhcpd[96559]: you want, please write a subnet declaration

Jun 02 19:07:43 master systemd[1]: dhcpd.service: main process exited, code=exited, status=1/FAILURE

Jun 02 19:07:43 master systemd[1]: Failed to start DHCPv4 Server Daemon.

Jun 02 19:07:43 master systemd[1]: Unit dhcpd.service entered failed state.

Jun 02 19:07:43 master systemd[1]: dhcpd.service failed.

[root@master ~]# ip a

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:f5 brd ff:ff:ff:ff:ff:ff

inet 192.168.15.129/24 brd 192.168.15.255 scope global noprefixroute dynamic ens33

valid\_lft 1607sec preferred\_lft 1607sec

inet6 fe80::8112:3373:6815:a4d4/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

3: ens34: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:ff brd ff:ff:ff:ff:ff:ff

4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0

valid\_lft forever preferred\_lft forever

5: virbr0-nic: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo\_fast master virbr0 state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

[root@master ~]# nmtui

[root@master ~]# nmtui

[root@master ~]# ip a

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:f5 brd ff:ff:ff:ff:ff:ff

inet 192.168.15.129/24 brd 192.168.15.255 scope global noprefixroute dynamic ens33

valid\_lft 1551sec preferred\_lft 1551sec

inet6 fe80::8112:3373:6815:a4d4/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

3: ens34: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:ff brd ff:ff:ff:ff:ff:ff

inet 10.10.10.2/24 brd 10.10.10.255 scope global noprefixroute ens34

valid\_lft forever preferred\_lft forever

inet6 fe80::e18b:c8cb:9f47:3333/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0

valid\_lft forever preferred\_lft forever

5: virbr0-nic: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo\_fast master virbr0 state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

[root@master ~]# makenetworks

Warning: [master]: The network entry '192\_168\_15\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_15\_0-255\_255\_255\_0'

Warning: [master]: The network entry '192\_168\_122\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_122\_0-255\_255\_255\_0'

[root@master ~]# makedhcp -n

Renamed existing dhcp configuration file to /etc/dhcp/dhcpd.conf.xcatbak

Warning: [master]: No dynamic range specified for 10.10.10.0. If hardware discovery is being used, a dynamic range is required.

[root@master ~]# vim /etc/dhcp/dhcpd.conf

[root@master ~]# cat /etc/dhcp/dhcpd.conf

#xCAT generated dhcp configuration

option conf-file code 209 = text;

option space isan;

option isan-encap-opts code 43 = encapsulate isan;

option isan.iqn code 203 = string;

option isan.root-path code 201 = string;

option space gpxe;

option gpxe-encap-opts code 175 = encapsulate gpxe;

option gpxe.bus-id code 177 = string;

option user-class-identifier code 77 = string;

option gpxe.no-pxedhcp code 176 = unsigned integer 8;

option tcode code 101 = text;

option iscsi-initiator-iqn code 203 = string;

ddns-update-style interim;

ignore client-updates;

option client-architecture code 93 = unsigned integer 16;

option tcode "Asia/Calcutta";

option gpxe.no-pxedhcp 1;

option www-server code 114 = string;

option cumulus-provision-url code 239 = text;

omapi-port 7911;

key xcat\_key {

algorithm hmac-md5;

secret "ZGEwNDZTTFo1V0dsS05pc0dPOTN2ZlhROWJxeXc5ZUs=";

};

omapi-key xcat\_key;

class "pxe" {

match if substring (option vendor-class-identifier, 0, 9) = "PXEClient";

ddns-updates off;

max-lease-time 600;

}

shared-network ens34 {

subnet 10.10.10.0 netmask 255.255.255.0 {

authoritative;

max-lease-time 43200;

min-lease-time 43200;

default-lease-time 43200;

option routers 10.10.10.2;

next-server 10.10.10.2;

option log-servers 10.10.10.2;

option ntp-servers 10.10.10.2;

option domain-name "cdac.in";

option domain-name-servers 10.10.10.2;

option interface-mtu 1500;

option domain-search "cdac.in";

option cumulus-provision-url "http://10.10.10.2:80/install/postscripts/cumulusztp";

zone cdac.in. {

primary 10.10.10.2; key xcat\_key;

}

zone 10.10.10.IN-ADDR.ARPA. {

primary 10.10.10.2; key xcat\_key;

}

if option user-class-identifier = "xNBA" and option client-architecture = 00:00 { #x86, xCAT Network Boot Agent

always-broadcast on;

filename = "http://10.10.10.2:80/tftpboot/xcat/xnba/nets/10.10.10.0\_24";

} else if option user-class-identifier = "xNBA" and option client-architecture = 00:09 { #x86, xCAT Network Boot Agent

filename = "http://10.10.10.2:80/tftpboot/xcat/xnba/nets/10.10.10.0\_24.uefi";

} else if option client-architecture = 00:00 { #x86

filename "xcat/xnba.kpxe";

} else if option vendor-class-identifier = "Etherboot-5.4" { #x86

filename "xcat/xnba.kpxe";

} else if option client-architecture = 00:07 { #x86\_64 uefi

filename "xcat/xnba.efi";

} else if option client-architecture = 00:09 { #x86\_64 uefi alternative id

filename "xcat/xnba.efi";

} else if option client-architecture = 00:02 { #ia64

filename "elilo.efi";

} else if option client-architecture = 00:0e { #OPAL-v3

option conf-file = "http://10.10.10.2:80/tftpboot/pxelinux.cfg/p/10.10.10.0\_24";

} else if substring (option vendor-class-identifier,0,11) = "onie\_vendor" { #for onie on cumulus switch

option www-server = "http://10.10.10.2:80/install/onie/onie-installer";

} else if substring(filename,0,1) = null { #otherwise, provide yaboot if the client isn't specific

filename "/yaboot";

}

} # 10.10.10.0/255.255.255.0 subnet\_end

} # ens34 nic\_end

[root@master ~]# cat /etc/dhcp/dhcpd.conf | grep "10.10.10.3"

[root@master ~]# cat /etc/dhcp/dhcpd.conf | grep "10.10.10.2"

option routers 10.10.10.2;

next-server 10.10.10.2;

option log-servers 10.10.10.2;

option ntp-servers 10.10.10.2;

option domain-name-servers 10.10.10.2;

option cumulus-provision-url "http://10.10.10.2:80/install/postscripts/cumulusztp";

primary 10.10.10.2; key xcat\_key;

primary 10.10.10.2; key xcat\_key;

filename = "http://10.10.10.2:80/tftpboot/xcat/xnba/nets/10.10.10.0\_24";

filename = "http://10.10.10.2:80/tftpboot/xcat/xnba/nets/10.10.10.0\_24.uefi";

option conf-file = "http://10.10.10.2:80/tftpboot/pxelinux.cfg/p/10.10.10.0\_24";

option www-server = "http://10.10.10.2:80/install/onie/onie-installer";

[root@master ~]# ip a

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:f5 brd ff:ff:ff:ff:ff:ff

inet 192.168.15.129/24 brd 192.168.15.255 scope global noprefixroute dynamic ens33

valid\_lft 1430sec preferred\_lft 1430sec

inet6 fe80::8112:3373:6815:a4d4/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

3: ens34: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:aa:c8:ff brd ff:ff:ff:ff:ff:ff

inet 10.10.10.2/24 brd 10.10.10.255 scope global noprefixroute ens34

valid\_lft forever preferred\_lft forever

inet6 fe80::e18b:c8cb:9f47:3333/64 scope link noprefixroute

valid\_lft forever preferred\_lft forever

4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0

valid\_lft forever preferred\_lft forever

5: virbr0-nic: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo\_fast master virbr0 state DOWN group default qlen 1000

link/ether 52:54:00:61:cf:ff brd ff:ff:ff:ff:ff:ff

[root@master ~]# makedns -n

Handling master in /etc/hosts.

Handling localhost in /etc/hosts.

Handling localhost in /etc/hosts.

Handling xcat-node1 in /etc/hosts.

Getting reverse zones, this may take several minutes for a large cluster.

Completed getting reverse zones.

Updating zones.

Completed updating zones.

Restarting named

Restarting named complete

Updating DNS records, this may take several minutes for a large cluster.

Completed updating DNS records.

DNS setup is completed

[root@master ~]# nodeset compute osimage=centos7.9-x86\_64-netboot-compute

xcat-node1: netboot centos7.9-x86\_64-compute