**1 ifdown ens37**

**2 ifup ens37**

**3 ip a**

**4 systemctl stop firewalld**

**5 systemctl disable firewalld**

**6 setenforcing 0**

**7 setenforcing -h**

**8 setenforcing --h**

**9 vi /etc/selinux**

**10 vi /etc/selinux/config**

**11 setenforcing**

**12 getenforcing**

**13 getenforce**

**14 init 0**

**[root@Xcat ~]# yum install yum-utils**

**[root@Xcat ~]# yum install epel-release**

**[root@Xcat ~]# wget -P /etc/yum.repos.d https://xcat.org/files/xcat/repos/yum/latest/xcat-core/xcat-core.repo**

**[root@Xcat ~]# wget -P /etc/yum.repos.d https://xcat.org/files/xcat/repos/yum/xcat-dep/rh7/x86\_64/xcat-dep.repo**

**[root@Xcat ~]# yum -y install xCAT**

**[root@Xcat ~]# cd /etc/p**

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

**[root@Xcat profile.d]# ll**

**[root@Xcat profile.d]# cat xcat.sh**

**[root@Xcat profile.d]# cd**

**[root@Xcat ~]# . /etc/profile.d/xcat.sh**

**[root@Xcat ~]# tabdump site**

**[root@Xcat ~]# lsxcatd -v**

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

**[root@Xcat ~]# chdef -t site dhcpinterface=ens37**

**1 object definitions have been created or modified.**

**[root@Xcat ~]# tabdump site | grep dhcp**

**"dhcplease","43200",,**

**"dhcpinterface","ens37",,**

**[root@Xcat ~]# lsblk**

**NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT**

**sda 8:0 0 120G 0 disk**

**├─sda1 8:1 0 1G 0 part /boot**

**└─sda2 8:2 0 119G 0 part**

**├─centos-root 253:0 0 50G 0 lvm /**

**├─centos-swap 253:1 0 7.6G 0 lvm [SWAP]**

**└─centos-home 253:2 0 61.4G 0 lvm /home**

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

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

**9203712+0 records in**

**9203712+0 records out**

**4712300544 bytes (4.7 GB) copied, 129.895 s, 36.3 MB/s**

**[root@Xcat ~]# ll /dev/sr0**

**brw-rw----+ 1 root cdrom 11, 0 Jun 2 21:33 /dev/sr0**

**[root@Xcat ~]# copycds centos.iso**

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

**Media copy operation successful**

**[root@Xcat ~]# lsdef -t os image**

**Error: [Xcat]:**

**Type 'os' is not a valid xCAT object type.**

**[root@Xcat ~]# 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@Xcat ~]# cd /install/**

**centos7.9/ postscripts/ prescripts/ winpostscripts/**

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

**EFI/ images/ isolinux/ LiveOS/ Packages/ repodata/**

**[root@Xcat ~]# lsdef -t osimage centos7.9-x86\_64-netboot-compute**

**Object name: centos7.9-x86\_64-netboot-compute**

**exlist=/opt/xcat/share/xcat/netboot/centos/compute.centos7.exlist**

**imagetype=linux**

**osarch=x86\_64**

**osdistroname=centos7.9-x86\_64**

**osname=Linux**

**osvers=centos7.9**

**otherpkgdir=/install/post/otherpkgs/centos7.9/x86\_64**

**pkgdir=/install/centos7.9/x86\_64**

**pkglist=/opt/xcat/share/xcat/netboot/centos/compute.centos7.pkglist**

**postinstall=/opt/xcat/share/xcat/netboot/centos/compute.centos7.postinstall**

**profile=compute**

**provmethod=netboot**

**rootimgdir=/install/netboot/centos7.9/x86\_64/compute**

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

**-bash: cd: install/netboot/centos7.9/x86\_64/compute: No such file or directory**

**[root@Xcat ~]# genimage centos7.9-x86\_64-netboot-compute**

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

**-bash: cd: install/netboot/centos7.9/x86\_64/compute: No such file or directory**

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

**-bash: cd: install/netboot/centos7.9/x86\_64/compute: No such file or directory**

**[root@Xcat ~]# cd /install/**

**centos7.9/ netboot/ postscripts/ prescripts/ winpostscripts/**

**[root@Xcat ~]# cd /install/netboot/centos7.9/x86\_64/compute/rootimg/**

**[root@Xcat rootimg]# ls**

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

**[root@Xcat rootimg]# ll**

**[root@Xcat rootimg]# mkdir -p /install/custom/netboot**

**[root@Xcat rootimg]# ll /install/custom/netboot**

**total 0**

**[root@Xcat rootimg]# 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@Xcat rootimg]# lsdef -t osimage centos7.9-x86\_64-netboot-compute***

**Object name: centos7.9-x86\_64-netboot-compute**

**exlist=/opt/xcat/share/xcat/netboot/centos/compute.centos7.exlist**

**imagetype=linux**

**osarch=x86\_64**

**osdistroname=centos7.9-x86\_64**

**osname=Linux**

**osvers=centos7.9**

**otherpkgdir=/install/post/otherpkgs/centos7.9/x86\_64**

**permission=755**

**pkgdir=/install/centos7.9/x86\_64**

**pkglist=/opt/xcat/share/xcat/netboot/centos/compute.centos7.pkglist**

**postinstall=/opt/xcat/share/xcat/netboot/centos/compute.centos7.postinstall**

**profile=compute**

**provmethod=netboot**

**rootimgdir=/install/netboot/centos7.9/x86\_64/compute**

**synclists=/install/custom/netboot/compute.synclist**

***[root@Xcat rootimg]# echo "/etc/passwd -> /etc/passwd" > /install/custom/netboot/compute.synclist***

***[root@Xcat rootimg]# echo "/etc/group -> /etc/group" >> /install/custom/netboot/compute.synclist***

***[root@Xcat rootimg]# echo "/etc/shadow -> /etc/shadow" >> /install/custom/netboot/compute.synclist***

***[root@Xcat rootimg]# ll /etc/group***

**-rw-r--r-- 1 root root 1048 Jun 2 21:44 /etc/group**

***[root@Xcat rootimg]# lsdef -t osimage centos7.9-x86\_64-netboot-compute***

***[root@Xcat rootimg]# cat /install/custom/netboot/compute.synclist***

**/etc/passwd -> /etc/passwd**

**/etc/group -> /etc/group**

**/etc/shadow -> /etc/shadow**

***[root@Xcat rootimg]# packimage centos7.9-x86\_64-netboot-compute***

***[root@Xcat rootimg]# mkdef -t node cn01 groups=compute,all ip=10.10.10.3 mac=00:0C:29:A1:72:57 netboot=xnba***

**Warning: [Xcat]: A definition for 'cn01' already exists. No changes will be made. Run again with '-f' option to force replace.**

**Error: [Xcat]: 0 object definitions have been created or modified.**

***[root@Xcat rootimg]# mkdef -f -t node cn01 groups=compute,all ip=10.10.10.3 mac=00:0C:29:A1:72:57 netboot=xnba***

1 object definitions have been created or modified.

***[root@Xcat rootimg]# chdef -t site domain=cdac.in***

**1 object definitions have been created or modified.**

***[root@Xcat rootimg]# tabdaump site |grep domain***

**bash: tabdaump: command not found...**

**[root@Xcat rootimg]# tabdump site |grep domain**

**"domain","cdac.in",,**

***[root@Xcat rootimg]# lsdef cn01***

**Object name: cn01**

**groups=compute,all**

**ip=10.10.10.3**

**mac=00:0C:29:A1:72:57**

**netboot=xnba**

**postbootscripts=otherpkgs**

**postscripts=syslog,remoteshell,syncfiles**

**[root@Xcat rootimg]# cat /etc/hosts**

**127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4**

**::1 localhost localhost.localdomain localhost6 localhost6.localdomain6**

**10.10.10.2 Xcat**

**[root@Xcat rootimg]# makehosts**

**[root@Xcat rootimg]# cat /etc/hosts**

**127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4**

**::1 localhost localhost.localdomain localhost6 localhost6.localdomain6**

**10.10.10.2 Xcat**

**10.10.10.3 cn01 cn01.cdac.in**

**[root@Xcat rootimg]# vi /etc/hosts**

**[root@Xcat rootimg]# cat /etc/hosts**

**127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4**

**::1 localhost localhost.localdomain localhost6 localhost6.localdomain6**

**10.10.10.2 Xcat Xcat.cdac.in**

**10.10.10.3 cn01 cn01.cdac.in**

***[root@Xcat rootimg]# makenetworks***

Warning: [Xcat]: The network entry '10\_10\_10\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '10\_10\_10\_0-255\_255\_255\_0'

Warning: [Xcat]: The network entry '192\_168\_100\_0-255\_255\_255\_0' already exists in xCAT networks table. Cannot create a definition for '192\_168\_100\_0-255\_255\_255\_0'

Warning: [Xcat]: 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@Xcat rootimg]# makedhcp -n***

***[root@Xcat rootimg]# cat /etc/dhcp/dhcpd.conf***

***[root@Xcat rootimg]# cat /etc/dhcp/dhcpd.conf |grep next***

***[root@Xcat rootimg]# makedns -n***

***[root@Xcat rootimg]# 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@Xcat rootimg]# nodeset compute osimage=centos7.9-x86\_64-netboot-compute***

**cn01: netboot centos7.9-x86\_64-compute**