**network**

1.ifconfig -a ifconfig iwconfig iwlist (inter\_name) scan/scanning

2.rfkill list rfkill block/unblock *index* ifconfig inter\_name up/down ifup inter\_name ifdown inter\_name

3.dhclient inter\_name ifconfig inter\_name parameters iwconfig inter\_name parameters

4./etc/init.d/networking /etc/network/interfaces

5.hostname /etc/hosts

6./etc/resolv.conf nslookup domain nslookup -qf=ns xx.xx dig domain host domain

7.route -n arp -n

8.ping -M do -s 2000 -c N ip(linux) ifconfig eth0 mtu 2000 ping -f -l 2000 -n 2 ip(windows) netsh interface ipv4 show subinterfaces, netsh interface ipv4 set subinterface “xx” mtu=2000 store=persistent traceroute -n ip

9. sctp\_darn -H <local\_IP> -P <local\_port> -l sctp\_darn -H <local\_IP> -P <local\_port> -h <remote\_IP> -p <remote\_port> -s sctp\_test -H <local\_IP> -P <local\_port> -h <remote\_IP> -p <remote\_port> -s sctp\_test -H <local\_IP> -P <local\_port> -l

10. *interface*: /etc/sysconfig/network/ifcfg-ethx, BOOTPROTO:static/dhcp *route*: /etc/sysconfig/network/routes *DNS*: /etc/resolv.conf

DHCP: /var/lib/dhcp/dhclient\*-ethx.lease

11. dhcpd: /var/lib/dhcp/dhclient.leases /etc/dhcpd.conf option routers 192.168.4.1, option domain-name-server 10.185.56.40, option ntp-server 150.236.57.81, subnet 192.168.0.0 netmask 255.255.0.0 {}, host bjg2enb01 {}

**disk/partition**

1.fdisk -l fdisk disk partprobe mkfs -t ext3

2.mount -l df mount umount

3.mdadm --create /dev/mdx --auto=yes --level=0/1/5 --raid-devices=m --spare-devices=n devices(m+n)

mdadm --detail /dev/mdx

mdadm --manage /dev/mdx --add device --remove device

mdadm --stop /dev/mdx

mdadm --assemble /dev/mdx

rm /dev/mdx

4.lvm

①partition - pv(physical volume) - vg(volume group)/pe(physical extend) - lv(logic volume)

②pvcreate partition pvremove partition pvscan pvdisplay

③vgcreate -s 16m vg\_name pv\_names vgremove vg\_name vgextend vg\_name pv\_name vgreduce vg\_name pv\_name vgscan vgdisplay

④lvcreate -l number\_pe -n lv\_name vg\_name lvremove /dev/vg\_name/lv\_name lvresize -l +/-number\_pe /dev/vg\_name/lv\_name

lvextend -l +number\_pe /dev/vg\_name/lv\_name

lvreduce -l -number\_pe /dev/vg\_name/lv\_name

resize2fs /dev/vg\_name/lv\_name

lvscan lvdisplay

**tarball**

1.tar -zcvf tar -zxvf 2../configure( --help) ---Makefile 3.make clean 4.make 5.make check 6.make install /usr/local/

**runlevel&terminal**

1.who who am i tty chvt n = (ctrl-)alt+Fn ctrl+alt+backspace

2.runlevel init x(0 3 5 6) /etc/inittab

3.startx -- :n init 5

4.shutdown -P now reboot halt poweroff sync exit/quit

**process/thread**

1.ps aux ps -l top pstree -Aup ps -ef pstree -H <PID>

2.pidof command\_name kill -9 pid killall -9 command\_name

3. ps -A -o stat,ppid,pid,cmd | grep -e 'bjenb03' | awk '{print $3}' | xargs kill -9 kill -HUP xxx

4. ps auxH ps -efL ps -efLm ps -AL -o stat,pid,ppid,lwp,cmd htop(shift+H, t)

**service**

1./etc/init.d/script start/restart/stop/status service service\_name start/restart/stop/status service --status-all systemctl start/restart/stop/status service\_name systemctl list-units --type=service

2. netstat -tulnp netstat -in netstat -rn cat /etc/services

local address -- 0.0.0.0/\*:listen all interface | 127.0.0.1/\*:only listen lo interface

3.chkconfig --list chkconfig service\_name on/off update-rc.d service\_name defaults update-rc.d service\_name remove systemctl enable service\_name systemctl disable service\_name

**file&directory**

1.chgrp chown chmod -R 755 umask umask 022 (file:666 dir:777)

2./etc/selinux/config setenforce getenforce

3.service iptables service ufw

4.cd ls -al mkdir rmdir touch ln cp mv rm -r or \rm -r

5.pwd -p basename dirname history

6.cat file vim more less od

7.which command whereis command type command updatedb locate file 8.find /local\_stg/lterbsFtp\_up/up -noleaf -maxdepth 1 -mtime +90 -type d -name "CXP102051\*" | xargs rm -rf

9.man info iconv -l iconv -f gbk -t utf8 xx > yy

10.df -h du -sh ./\* du -sh ./

11. scp -p <port> -r /xx/xx/ ejqizng@ip:/xx/xx rsync -arv --delete /xx/xx /yy/yy/ rsync -arv --delete /xx/xx/ /yy/yy/

12. tftp -g/-p -r/-l file host

**user**

1.su - sudo sudo passwd root

2.groupadd xx useradd -G/-g xx xx usermod -A/-R/-G/-g xx -u xx -l xx -d xx xx passwd xx id xx groupmod -g xx -n xx xx userdel xx groupdel xx chown chgrp

3.grep xx /etc/passwd grep xx /etc/group /etc/sudoers

**system**

1.uname -r uname -a hostname uptime free dmesg vmstat lspci lsusb

2./lib/modules/$(uname -r)/modules.dep /lib/modules/$(uname -r)/kernel/xx.ko depmod lsmod modinfo mod\_name modprobe mod\_name modprobe -r mod\_name

3.watch ntpq –p

4. more /proc/cpuinfo | grep processor | wc –l

5. [1,2,&] >/>> &[n],file,&-,/dev/null 0 < &[n],file

6. free -m/-g <total = code/data + buffers + cached + free> top <"1","b","x","shift+</>"> echo $0 echo $$

7. @reboot - Run once, at startup; @yearly/@annually - Run once a year, "0 0 1 1 \*"; @monthly - Run once a month, "0 0 1 \* \*"; @weekly - Run once a week, "0 0 \* \* 0"; @daily/@midnight - Run once a day, "0 0 \* \* \*"; @hourly - Run once an hour, "0 \* \* \* \*"

**daemon**

1.generally the shell will send *HUP* signal to *all child process* when shell logout/exit

2.crtl+z jobs fg %<job\_num> bg %<job\_num> kill -9 %<job\_num> /xx/xx & -> childprocess

3.nohup /xx/xx & disown -h %<job\_num> -> exit

4.setsid /xx/xx (/xx/xx &) -> grandprocess, then adopt by init

5.start-stop-daemon --start --background --exec /usr/bin/java -- -jar /home/bruce/Desktop/jenkins.war start-stop-daemon --stop --name java

6.screen –list/-ls screen -*dm*S <screen\_name> screen -r <screen\_name> screen -d/screen -d <screen\_name> exit screen -x kill -9 <PID> screen -wipe ctrl+a,ctrl+d ctrl+a,ctrl+c ctrl+a,ctrl+p/ctrl+a,ctrl+n ctrl+a,ctrl+a exit

**Inode**

1. stat xx df -i ls -i xx

2. ln xx xx ln -s xx xx rm -rf xx

**Shell Variable**

1. set <var/lower-case>=<value> set *local\_variable*

2. export <var/upper-case>=<value> setenv <var/upper-case> <value> env *global\_variable*

3. echo $xx unset <var>

4. /etc/profile /home/xx/.profile source /xx/xx

5. alias

**vm tools**

liunx:lsmod | grep vmhgfs /sbin/mount.vmhgfs

.host:/share-name mount -t vmhgfs .host:/share-name

windows:\\vmware-host\Shared Folders\share-name

**NFS**

1./etc/exports service rpcbind start service nfsserver start exportfs -v(list) exportfs -arv(re) exportfs -auv(shut) rpcinfo -p rpcinfo -p <server-IP>

2. showmount -a(connected) showmount -e(list) showmount -e <nfs-server-IP> tail /var/lib/nfs/etab

3. /etc/fstab mount -a unmount -a mount -t nfs xx:x xxx

4. df -h mount -l

5.fuser -m /proj/lterbsdailytest umount -l/-f /proj/lterbsdailytest

**NTP**

1. hwclock –show hwclock –systohc hwclock –hctosys date

2. watch ntpq –p /etc/ntp.conf service ntpd

3. ntpdate <IP> ntpdate –d <IP> sntp –P no –r <IP> sntp –w <IP>

4. /etc/localtime /usr/share/zoneinfo/Asia/Shanghai Beijing

**Performance**

1. iostat -x 2 vmstat 2 mpstat -P ALL 2 free -g top htop

2. pidstat -u 2 pidstat -d 2 pidstat -rh 2 (-t : show thread on)

3. pmap <PID>

4. sar -u(CPU) -n(network) DEV -n EDEV -b(I/O) -B(paging) -S(swap) 2

5. sysctl -p sysctl -a sysctl net/net.ipv4 /proc/sys/xx/xx /etc/sysctl.conf

**Route**

0. ifconfig eth0 192.168.1.2 netmask 255.255.255.0

1. route add -net xxx netmask xxx dev eth0

2. route add default gw xxx | route add -net xxx netmask xxx gw xxx | route add -host xxx gw xxx