

## 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

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

② pvcreate partition pvremove partition pvscan pvdisplay

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

④ lvcreate -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. `ctrl+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 -dmS <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 -li 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**

linux: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