

- SSH
- Linux
- -

SSH

SSH

- user host

ssh user@host

-

ssh host

- SSH 22 22 p

ssh -p 2222 user@host

ssh 2222

Linux

```
shutdown -h now
```

```
shutdown -h 10  
10
```

```
shutdown -h 11:00  
11 00
```

```
shutdown -h +10  
10
```

```
shutdown -c
```

```
shutdown -r now
```

```
shutdown -r 10  
10
```

```
shutdown -r 11:00
```

```
reboot
```

```
init 6
```

```
init 0
```

```
telinit 0
```

```
poweroff
```

```
halt
```

```
sync  
buff
```

```
logout  
  Shell  
  /  /
```

```
uname -a  
  /OS/CPU
```

```
uname -r
```

```
uname -m
```

```
arch
```

```
hostname
```

```
who
```

```
who am i
```

```
whoami
```

```
cat /proc/version  
  linux
```

```
cat /proc/cpuinfo  
  CPU
```

```
cat /proc/interrupts
```

```
cat /proc/loadavg
```

```
uptime
```

```
env
```

```
lsusb -tv  
USB
```

```
lspci -tv  
PCI
```

```
lsmod
```

```
grep MemTotal /proc/meminfo
```

```
grep MemFree /proc/meminfo
```

```
free -m
```

```
date
```

```
cal 2021  
2021
```

```
top  
cpu/ /
```

```
vmstat 1 20  
1 20
```

```
iostat  
io /cpu
```

```
sar -u 1 10  
cpu 1 10
```

```
sar -d 1 10
```

```
fdisk -l
```

```
swapon -s
```

```
df -h
```

```
df -hl
```

```
du -sh /dir
```

```
du -sk * | sort -rn
```

```
mount /dev/hda2 /mnt/hda2  
hda2
```

```
mount -t ntfs /dev/sdc1 /mnt/usbhd1  
ntfs
```

```
mount -o loop xxx.iso /mnt/cdrom  
iso
```

```
mount /dev/sda1 /mnt/usbdisk  
usb /
```

```
umount -v /dev/sda1
```

```
umount -v /mnt/mymnt
```

```
fuser -km /mnt/hda1  
( )
```

```
useradd codesheep
```

```
userdel -r codesheep
```

```
usermod -g group_name user_name
```

```
usermod -aG group_name user_name
```

```
usermod -s /bin/ksh -d /home/codepig  
-g dev codesheep  
codesheep Shell
```

```
groups test  
test
```

```
groupadd group_name
```

```
groupdel group_name
```

```
groupmod -n new_name old_name
```

```
su - user_name
```

```
passwd
```

```
passwd codesheep
```

```
w
```

```
id codesheep  
codesheep
```

```
last
```

```
crontab -l
```

```
cut -d: -f1 /etc/passwd
```

```
cut -d: -f1 /etc/group
```

```
ifconfig
```

```
ifconfig eth0
```

```
route -n
```

```
netstat -lnp
```

```
netstat -anp  
TCP
```

```
netstat -lntp  
TCP/UDP
```

```
ifup eth0  
eth0
```

```
ifdown eth0  
eth0
```

```
iptables -L  
iptables  
ifconfig eth0 192.168.1.1 netmask  
255.255.255.0
```

```
ip  
  
dhclient eth0
```

```
dhcp eth0  
route add -net 0/0 gw Gateway_IP
```



```
route add -net 192.168.0.0 netmask  
255.255.0.0 gw 192.168.1.1
```

```
'192.168.0.0/16'  
route del 0/0 gw Gateway_IP
```

```
hostname
```

```
host www.codesheep.cn
```

```
nslookup www.codesheep.cn  
DNS
```

```
ps -ef
```

```
ps -ef | grep codesheep
```

```
kill -s name  
kill
```

```
kill -s pid  
kill pid
```

```
top
```

```
vmstat 1 20  
1
```

```
20  
iostat  
io /cpu
```

```
sar -u 1 10  
cpu 1  
10
```

```
sar -d 1 10
```

```
chkconfig --list
```

```
service < > status
```

```
service < > start
```

```
service < > stop
```

```
service < > restart
```

```
systemctl status < >
```

```
systemctl start < >
```

```
systemctl stop < >
```

```
systemctl restart < >
```

```
systemctl enable < >
```

```
systemctl disable < >
```

```
cd < >
```

```
cd ..
```

```
cd ../..
```

```
cd
```

```
cd -
```

```
pwd
```

```
ls
```

```
ls -F
```

```
ls -l
```

```
ls -a
```

```
ls -lh
```

```
ls -lSr
```

```
tree
```

```
mkdir < >
```

```
mkdir dir1 dir2
```

```
mkdir -p  
/tmp/dir1/dir2
```

```
rm -f file1  
'file1'
```

```
rmdir dir1  
'dir1'  
-rfrmdir1  
'dir1'
```

```
rm -rf dir1 dir2
```

```
mv old_dir new_dir  
/
```

```
cp file1 file2
```

```
cp dir/* .
```

```
cp -a dir1 dir2
```

```
cp -a /tmp/dir1 .
```

```
ln -s file1 link1  
/
```

```
ln file1 lnk1  
/
```

```
find / -name file1  
/
```

```
find / -user user1  
user1 /
```

```
find /dir -name *.bin  
/dir .bin
```

```
locate < >
```

```
locate *.mp4  
.mp4
```

```
whereis < >  
/
```

```
which < >
```

```
chmod ugo+rwx  
dir1  
(u)(g)(o) r  
(w)(x)
```

```
chmod go-rwx dir1  
(g)(o)
```

```
chown user1 file1
```

```
chown -R user1  
dir1
```

```
chgrp group1 file1  
chown
```

```
user1:group1 file1
```

```
cat file1
```

```
cat -n file1
```

```
cat xxx.txt
awk 'NR%2==1'
tac file1
```

```
more file1
```

```
less file1
more
```

```
head -2 file1
```

```
tail -2 file1
```

```
tail -f /log/msg
```

```
grep codesheep hello.txt
hello.txt      codesheep
```

```
grep ^sheep hello.txt
hello.txt      sheep
```

```
grep -o hello.txt
hello.txt
```

```
sed 's/s1/s2/g' hello.txt
hello.txt      s1  s2
```

```
sed '/^$/d' hello.txt
hello.txt
```

```
sed '/ *#/d; /^$/d' hello.txt
hello.txt
```

```
sed -e 'ld' hello.txt
hello.txt
```

```
sed -n '/s1/p' hello.txt
"s1"
```

```
sed -e 's/ *$//' hello.txt
```

```
sed -e 's/s1//g' hello.txt
s1
```

```
sed -n '1,5p;5q' hello.txt
5
```

```
sed -n '5p;5q' hello.txt
```

```
5
```

```
paste file1 file2
```

```
paste -d '+' file1 file2
```

```
"+"
```

```
sort file1 file2
```

```
sort file1 file2
```

```
uniq
```

```
sort file1 file2
```

```
uniq -u
```

```
sort file1 file2
```

```
uniq -d
```

```
comm -1 file1 file2
```

```
('file1')
```

```
comm -2 file1 file2
```

```
('file2')
```

```
comm -3 file1 file2
```

```
()
```

```
zip xxx.zip file
```

```
zip
```

```
zip -r xxx.zip file1 file2 dir1
```

```
+ zip
```

```
unzip xxx.zip
```

```
zip
```

```
tar -cvf xxx.tar file
```

```
tar
```

```
tar -cvf xxx.tar file1 file2 dir1
```

```
+ tar
```

```
tar -tf xxx.tar
```

```
tar
```

```
tar -xvf xxx.tar
```

```
tar
```

```
tar -xvf xxx.tar -C /dir
```

```
tar
```

```
tar -cvfj xxx.tar.bz2 dir  
bz2
```

```
tar -jxvf xxx.tar.bz2  
bz2
```

```
tar -cvfz xxx.tar.gz dir  
gzip
```

```
tar -zxvf xxx.tar.gz  
gzip
```

```
bunzip2 xxx.bz2  
bz2
```

```
bzip2 filename
```

```
gunzip xxx.gz  
gzip
```

```
gzip filename
```

```
gzip -9 filename
```

```
rpm -qa  
rpm
```

```
rpm -q pkg_name  
rpm
```

```
rpm -q --whatprovides xxx  
xxx
```

```
rpm -q --whatrequires xxx  
xxx
```

```
rpm -q --changelog xxx  
xxx
```

```
rpm -qi pkg_name
```

```
rpm -qd pkg_name
```

```
rpm -qc pkg_name  
rpm
```

```
rpm -ql pkg_name
```

```
rpm -qf filename
```

```
rpm -qR pkg_name
```

```
rpm -ivh xxx.rpm  
rpm
```

```
rpm -ivh --test xxx.rpm  
rpm
```

```
rpm -ivh --nodeps xxx.rpm  
rpm
```

```
rpm -e xxx
```

```
rpm -Fvh pkg_name  
rpm
```

```
rpm -Uvh pkg_name  
rpm
```

```
rpm -V pkg_name  
RPM  
RPM
```

```
yum repolist enabled
```

```
yum search pkg_name
```

```
yum install pkg_name
```

```
yum install --downloadonly pkg_name
```

```
yum list
```

```
yum list installed
```

```
yum list updates
```



```
yum check-update
```

```
yum update
```

```
yum update pkg_name
```

```
yum deplist pkg_name
```

```
yum remove pkg_name
```

```
yum clean all
```

```
yum clean packages
```

```
yum clean headers  
header  
YUM
```

```
dpkg -c xxx.deb  
deb
```

```
dpkg -i xxx.deb  
/ deb
```

```
dpkg -r pkg_name  
deb
```

```
dpkg -P pkg_name  
deb
```

```
dpkg -l  
deb
```

```
dpkg -l pkg_name
```

```
dpkg -L pkg_name  
deb
```

```
dpkg -s pkg_name
```

```
dpkg --unpack xxx.deb  
deb  
DPKG
```

```
apt-cache search pkg_name
```

```
apt-cache show pkg_name
```

```
apt-get install pkg_name  
/
```

```
apt-get purge pkg_name
```

```
apt-get remove pkg_name
```

```
apt-get update
```

```
apt-get upgrade
```

```
apt-get clean
```

IT

“ ”

RBAC

RBAC

IT

IT

IT

IaC

IaC

IaC

IaC

IaC

Red HatR Ansible AutomationR

Cloud Virtual Machine

= +

- **qcow2 vmdk vhd raw**

- 50GB qcow2 500GB
- GPT / Linux xfs ext2 ext3 ext4 / Windows NTFS/ MBR ;
- eth0 eth0 selinux disabled DNS ttyS0
- KVM Virtio / cloud-init hostname NTP yum

1. qemu-img VHD RAW
2. [KMS](#)
3. [Linux](#)
4. [Linux](#) [Virtio](#)
5. [Linux](#) cloudinit
6. [Linux](#)
7. [Windows](#) [Windows](#)
8. [Windows](#)
9. 1

—

Windows

1. **Win + R**
2. “ **cmd** ”
- 3.

```
qemu-img --help
```

```
cd < >
```

```
qemu-img convert -f < > -O < > < > >
```

```
cd < >
```

```
qemu-img convert -f < > -O < > < > >
```

- `-f`
 - `-O`
- `test.qcow2` `test.raw`

```
qemu-img convert -f qcow2 -O raw test.qcow2 test.raw
```