

```
[root@joe host ~]# free
              total        used        free      shared  buff/cache   available
Mem:      1832932      181188      1527656         8740       124088      1510672
Swap:      2097148           0       2097148

[root@joe host ~]# df
Filesystem            1k-blocks    Used Available Use% Mounted on
devtmpfs               904516         0    904516   0% /dev
tmpfs                  916464         0    916464   0% /dev/shm
tmpfs                  916464      8740    907724   1% /run
tmpfs                  916464         0    916464   0% /sys/fs/cgroup
/dev/mapper/centos_joe host-root 17811456 1283424 16528032   8% /
/dev/sda1             1038336    153380    884956  15% /boot
tmpfs                 183296         0    183296   0% /run/user/0

[root@joe host ~]# 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: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:8f:e1:20 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.22/24 brd 192.168.1.255 scope global noprefixroute dynamic enp0s3
        valid_lft 84783sec preferred_lft 84783sec
    inet6 fe80::2320:806e:dbdd:c489/64 scope link noprefixroute
        valid_lft forever preferred_lft forever

[root@joe host ~]# ping www.google.com
PING www.google.com (142.250.191.228) 56(84) bytes of data:
64 bytes from ord38s32-in-f4.1e100.net (142.250.191.228): icmp_seq=1 ttl=114 time=17.1 ms
64 bytes from ord38s32-in-f4.1e100.net (142.250.191.228): icmp_seq=2 ttl=114 time=27.2 ms
64 bytes from ord38s32-in-f4.1e100.net (142.250.191.228): icmp_seq=3 ttl=114 time=21.3 ms
^C
--- www.google.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 17.107/21.908/27.247/4.157 ms
[root@joe host ~]#
```

```
CentOS Linux 7 (Core)
Kernel 3.10.0-1160.el7.x86_64 on an x86_64

joehost login: root
Password:
Last login: Wed Nov  3 22:00:32 on tty1
[root@joehost ~]# 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: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:8f:e1:20 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.22/24 brd 192.168.1.255 scope global noprefixroute dynamic enp0s3
        valid_lft 85633sec preferred_lft 85633sec
    inet6 fe80::2320:806e:dbdd:c489/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@joehost ~]# _
```

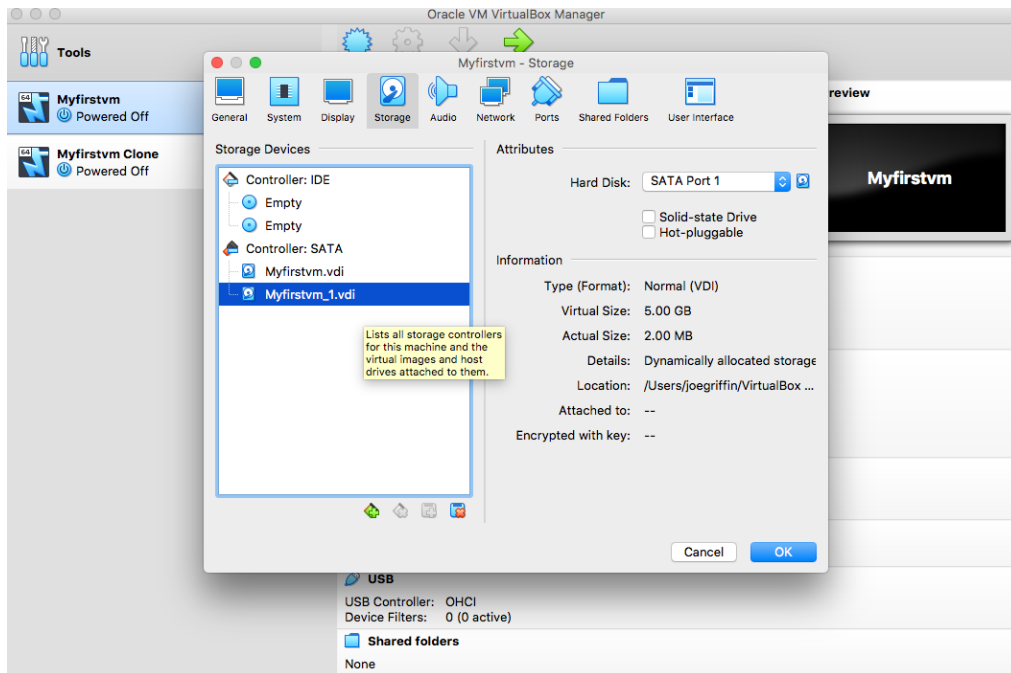
```
CentOS Linux 7 (Core)
Kernel 3.10.0-1160.el7.x86_64 on an x86_64

joehost login: ls
Password:
Login incorrect

joehost login: root
Password:
Last login: Thu Nov  4 00:02:14 on tty1
[root@joehost ~]# ls
anaconda-ks.cfg
[root@joehost ~]# cd/tmp
-bash: cd/tmp: No such file or directory
[root@joehost ~]# cd /tmp
[root@joehost tmp]# ls
ks-script-9LFcXp  yum.log
[root@joehost tmp]# cd
[root@joehost ~]# ls
anaconda-ks.cfg
[root@joehost ~]# _
```

7e. The values can be displayed in a more user friendly way by adding an extra step to the free command. The command `free -h` displays the results in a more user friendly way with units.

7f. The same step can be applied to the `df` command. The command `df -h` also displays the results in a more user friendly way with units.



Command `lsblk`

```
[root@hostjoe ~]# lsblk
NAME                                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda                                 8:0    0   20G  0 disk
├─sda1                             8:1    0    1G  0 part /boot
├─sda2                             8:2    0   19G  0 part
│   └─centos_hostjoe-root          253:0    0   17G  0 lvm /
│       └─centos_hostjoe-swap      253:1    0    2G  0 lvm [SWAP]
sdb                                 8:16    0    5G  0 disk
sr0                                11:0    1 1024M  0 rom
sr1                                11:1    1 1024M  0 rom
[root@hostjoe ~]# _
```

Here is the copied file! Thanks for your help

