

Linux

Linux windows

(PS: CentOS 6.5 1T)10G

```
fdisk
```

```
console fdisk -l /dev/sda
```

```
console fdisk /dev/sda
```

1. m
2. p
3. a
4. n
 - 4.1. e [] (extend)
 - 4.2. p [] (primary)
5. t
6. d
7. q
8. w

```
mkfs
```

```
mkfs -t
```

```
-t : Linux ext2
```

```
-c : partition
```

```
-v :
```

```
fdisk -l
```

```
[root@jx-web: ~]# fdisk -l
```

Disk /dev/vda: 26.8 GB, 26843545600 bytes
255 heads, 63 sectors/track, 3263 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x000bce79

Device	Boot	Start	End	Blocks	Id	System
/dev/vda1	*	1	3264	26213376	83	Linux

Disk /dev/vdb: 34.4 GB, 34359738368 bytes
255 heads, 63 sectors/track, 4177 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00062e8c

Device	Boot	Start	End	Blocks	Id	System
/dev/vdb1		1	4177	33551721	82	Linux swap / Solaris

Disk /dev/vdc: 1073.7 GB, 1073741824000 bytes
16 heads, 63 sectors/track, 2080507 cylinders
Units = cylinders of 1008 * 512 = 516096 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x0902eabd

Device	Boot	Start	End	Blocks	Id	System
/dev/vdc1		1	2080507	1048575496+	83	Linux

Disk /dev/vdd: 10.7 GB, 10737418240 bytes
16 heads, 63 sectors/track, 20805 cylinders
Units = cylinders of 1008 * 512 = 516096 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00000000

- Device
- Boot “*”

- Start
- End
- Blocks Blocks 1024
- Id ID EXT4 83 LVM 8e
- System

26.8G swap 34.4G 1T

10G (/dev/v

```
[root@jx-web ~]# fdisk /dev/vdd
```

```
Device contains neither a valid DOS partition table, nor Sun, SGI or OSF disklabel
```

```
Building a new DOS disklabel with disk identifier 0x2e355a48.
```

```
Changes will remain in memory only, until you decide to write them.
```

```
After that, of course, the previous content won't be recoverable.
```

```
Warning: invalid flag 0x0000 of partition table 4 will be corrected by w(rite)
```

```
WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
        switch off the mode (command 'c') and change display units to
        sectors (command 'u').
```

```
Command (m for help):
```

“Command (m for help):”

“m”

“n”

```
Command (m for help): n
```

```
Command action
```

```
  e   extended
```

```
  p   primary partition (1-4)
```

p e

p ~ ~

```
Partition number (1-4): 1
```

```
First cylinder (1-20805, default 1):
```

```
Using default value 1
```

```
Last cylinder, +cylinders or +size{K,M,G} (1-20805, default 20805): +5G
```

```
Command (m for help):
```

1~4

fdisk

"+size(K M G)"

"+size5G"

p

/dev/vdd1

Command (m for help): p

Disk /dev/vdd: 10.7 GB, 10737418240 bytes

16 heads, 63 sectors/track, 20805 cylinders

Units = cylinders of 1008 * 512 = 516096 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk identifier: 0x19652849

Device	Boot	Start	End	Blocks	Id	System
/dev/vdd1		1	10404	5243584+	83	Linux

Command (m for help): n

Command action

e extended

p primary partition (1-4)

e

Partition number (1-4): 4

First cylinder (10405-20805, default 10405):

Using default value 10405

Last cylinder, +cylinders or +size{K,M,G} (10405-20805, default 20805):

Using default value 20805

Command (m for help): p

Disk /dev/vdd: 10.7 GB, 10737418240 bytes

16 heads, 63 sectors/track, 20805 cylinders

Units = cylinders of 1008 * 512 = 516096 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk identifier: 0x19652849

Device	Boot	Start	End	Blocks	Id	System
/dev/vdd1		1	10404	5243584+	83	Linux
/dev/vdd4		10405	20805	5242104	5	Extended

Command (m for help): n

Command action

- l logical (5 or over)
- p primary partition (1-4)

l

First cylinder (10405-20805, default 10405):

Using default value 10405

Last cylinder, +cylinders or +size{K,M,G} (10405-20805, default 20805): +2G

Command (m for help): n

Command action

- l logical (5 or over)
- p primary partition (1-4)

l

First cylinder (14567-20805, default 14567):

Using default value 14567

Last cylinder, +cylinders or +size{K,M,G} (14567-20805, default 20805):

Using default value 20805

Command (m for help): p

Disk /dev/vdd: 10.7 GB, 10737418240 bytes

16 heads, 63 sectors/track, 20805 cylinders

Units = cylinders of 1008 * 512 = 516096 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk identifier: 0x19652849

Device	Boot	Start	End	Blocks	Id	System
/dev/vdd1		1	10404	5243584+	83	Linux
/dev/vdd4		10405	20805	5242104	5	Extended
/dev/vdd5		10405	14566	2097616+	83	Linux
/dev/vdd6		14567	20805	3144424+	83	Linux

3

2

w

q

Command (m for help): w

The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.

```
fdisk "d" fdisk  
Linux ext ext2 ext3 ext4 RHEL6 e  
/dev/vdd1 ext4
```

```
[root@jx-web ~]# mkfs -V -t ext4 -c /dev/vdd1  
mkfs (util-linux-ng 2.17.2)  
mkfs.ext4 -c /dev/vdd1  
mke2fs 1.41.12 (17-May-2010)  
 : 176 .  
  
=  
: Linux  
=4096 (log=2)  
=4096 (log=2)  
Stride=0 blocks, Stripe width=0 blocks  
328320 inodes, 1310720 blocks  
65544 blocks (5.00%) reserved for the super user  
=0  
Maximum filesystem blocks=1342177280  
40 block groups  
32768 blocks per group, 32768 fragments per group  
8208 inodes per group  
Superblock backups stored on blocks:  
    32768, 98304, 163840, 229376, 294912, 819200, 884736  
  
Checking for bad blocks (read-only test):  
    inode :  
Creating journal (32768 blocks):  
Writing superblocks and filesystem accounting information:  
  
This filesystem will be automatically checked every 38 mounts or  
180 days, whichever comes first.  Use tune2fs -c or -i to override.
```

```

/dev/vdd5    fat32
[root@jx-web ~]# mkfs -t vfat /dev/vdd5
mkfs (util-linux-ng 2.17.2)
mkfs.vfat /dev/vdd5
mkfs.vfat 3.0.9 (31 Jan 2010)

mkfs (util-linux-ng 2.17.2)
mkfs.vfat /dev/vdd5
mkfs.vfat:
           dosfstools    "yum install dosfstools"
[root@jx-web ~]# mkfs.ext4 /dev/vdd6
~~

```

```

Disk /dev/vdd: 10.7 GB, 10737418240 bytes
16 heads, 63 sectors/track, 20805 cylinders
Units = cylinders of 1008 * 512 = 516096 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x19652849

```

Device	Boot	Start	End	Blocks	Id	System
/dev/vdd1		1	10404	5243584+	83	Linux
/dev/vdd4		10405	20805	5242104	5	Extended
/dev/vdd5		10405	14566	2097616+	83	Linux
/dev/vdd6		14567	20805	3144424+	83	Linux

```

Linux          "/"  "boot"

```

~~

```

[root@jx-web ~]# mkdir /data1 /data2 /data3
[root@jx-web ~]# mount /dev/vdd1 /data1
[root@jx-web ~]# mount /dev/vdd5 /data2
[root@jx-web ~]# mount /dev/vdd6 /data3
[root@jx-web ~]# df -hT      //
Filesystem    Type  Size  Used Avail Use% Mounted on

```

```
/dev/vda1      ext4      25G   4.3G   20G   19% /
tmpfs          tmpfs     16G    72K   16G    1% /dev/shm
/dev/vdc1      ext4     985G   23G  912G    3% /opt
/dev/vdd1      ext4     4.8G   10M   4.6G    1% /data1
/dev/vdd5      vfat     2.0G   4.0K   2.0G    1% /data2
/dev/vdd6      ext4     2.9G   4.5M   2.8G    1% /data3
```

:

```
[root@jx-web ~]# vim /etc/fstab
```

```
/dev/vdd1      /data1      ext4      defaults      0      0
/dev/vdd5      /data2      vfat      defaults      0      0
/dev/vdd6      /data3      ext4      defaults      0      0
```

(PS: CentOS 6.5 1T)10G

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