



链滴

# Linux 磁盘分区问题

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# Linux磁盘分区

## 问题一：

如果遇到下述问题：

```
[root@ostack-228-32 ~]# mount /dev/sdb /data/  
mount: /dev/sdb is already mounted or /data busy
```

可以用此方式：

```
[root@ostack-228-32 ~]# dmsetup status  
VMDATA--node9-VMDATA--node9: 0 46816583680 thin-pool 0 15633/4145152 0/182877280  
- rw no_discard_passdown queue_if_no_space - 1024  
VMDATA--node9-VMDATA--node9_tdata: 0 46816583680 linear  
VMDATA--node9-VMDATA--node9_tmeta: 0 33161216 linear  
centos-swap: 0 268435456 linear  
centos-root: 0 629145600 linear  
[root@ostack-228-32 ~]# dmsetup remove_all  
[root@ostack-228-32 ~]# dmsetup status  
centos-swap: 0 268435456 linear  
centos-root: 0 629145600 linear
```

最后进行挂载：

```
[root@ostack-228-32 ~]# mkfs.xfs /dev/sdb  
mkfs.xfs: /dev/sdb appears to contain a partition table (dos).  
mkfs.xfs: Use the -f option to force overwrite.  
[root@ostack-228-32 ~]# mkfs.xfs /dev/sdb1  
meta-data=/dev/sdb1          isize=512  agcount=32, agsize=16777216 blks  
          =                   sectsz=4096 attr=2, projid32bit=1  
          =                   crc=1      finobt=0, sparse=0  
data      =                   bsize=4096 blocks=536870655, imaxpct=5  
          =                   sunit=64   swidth=192 blks  
naming    =version 2          bsize=4096  ascii-ci=0 ftype=1  
log       =internal log      bsize=4096  blocks=262143, version=2  
          =                   sectsz=4096 sunit=1 blks, lazy-count=1  
realtime  =none              extsz=4096  blocks=0, rtextents=0  
[root@ostack-228-32 ~]# mount /dev/sdb1 /data
```

## 问题二：

**fdisk 分区最大只能 2T 分区，需要使用 parted 分区**

```
[root@ostack-228-32 ~]# parted /dev/sdb  
GNU Parted 3.1  
Using /dev/sdb  
Welcome to GNU Parted! Type 'help' to view a list of commands.  
(parted) p  
Model: UN LOGICAL VOLUME (scsi)  
Disk /dev/sdb: 24.0TB  
Sector size (logical/physical): 512B/4096B
```

```

Partition Table: msdos
Disk Flags:
[]
Number Start End Size Type File system Flags
[]
(parted) mklabel gpt
Warning: The existing disk label on /dev/sdb will be destroyed and all data on this disk will be
lost. Do you want to continue?
Yes/No? y
(parted) mkpart
Partition name? []? sdb1
File system type? [ext2]? xfs
Start? 0
End? 24.0TB
Warning: The resulting partition is not properly aligned for best performance.
Ignore/Cancel? Ignore
(parted) p
Model: UN LOGICAL VOLUME (scsi)
Disk /dev/sdb: 24.0TB
Sector size (logical/physical): 512B/4096B
Partition Table: gpt
Disk Flags:
[]
Number Start End Size File system Name Flags
1 17.4kB 24.0TB 24.0TB sdb1
[]
(parted) quit
Information: You may need to update /etc/fstab.
[]
[root@ostack-228-32 ~]# fdisk -l
[]
Disk /dev/sda: 480.1 GB, 480070426624 bytes, 937637552 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 262144 bytes / 262144 bytes
Disk label type: dos
Disk identifier: 0x000ca2b9
[]
Device Boot Start End Blocks Id System
/dev/sda1 * 2048 37959679 18978816 83 Linux
/dev/sda2 37959680 935542783 448791552 8e Linux LVM
WARNING: fdisk GPT support is currently new, and therefore in an experimental phase. Use at
your own discretion.
[]
Disk /dev/sdb: 24004.6 GB, 24004587945984 bytes, 46883960832 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 262144 bytes / 786432 bytes
Disk label type: gpt
Disk identifier: 67F6088B-A02E-4E5A-AAC5-2A06A017E61E
[]
[]
# Start End Size Type Name
1 34 46883960798 21.9T Microsoft basic sdb1

```

Partition 1 does not start on physical sector boundary.

```
□  
Disk /dev/mapper/centos-root: 322.1 GB, 322122547200 bytes, 629145600 sectors  
Units = sectors of 1 * 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 4096 bytes  
I/O size (minimum/optimal): 262144 bytes / 262144 bytes
```

```
□  
□  
Disk /dev/mapper/centos-swap: 137.4 GB, 137438953472 bytes, 268435456 sectors  
Units = sectors of 1 * 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 4096 bytes  
I/O size (minimum/optimal): 262144 bytes / 262144 bytes
```

```
□  
[root@ostack-228-32 ~]# mkfs.xfs /dev/sd  
sda sda1 sda2 sdb sdb1  
[root@ostack-228-32 ~]# mkfs.xfs /dev/sdb1  
warning: device is not properly aligned /dev/sdb1  
Use -f to force usage of a misaligned device  
[root@ostack-228-32 ~]# mkfs.xfs -f /dev/sdb1  
warning: device is not properly aligned /dev/sdb1  
meta-data=/dev/sdb1          isize=512  agcount=32, agsize=183140480 blks  
        =                   sectsz=512  attr=2, projid32bit=1  
        =                   crc=1      finobt=0, sparse=0  
data      =                   bsize=4096 blocks=5860495095, imaxpct=5  
        =                   sunit=64   swidth=192 blks  
naming    =version 2          bsize=4096  ascii-ci=0  ftype=1  
log       =internal log      bsize=4096  blocks=521728, version=2  
        =                   sectsz=512  sunit=64 blks, lazy-count=1  
realtime  =none              extsz=4096  blocks=0, rtextents=0  
[root@ostack-228-32 ~]# mount /dev/sdb1 /data/  
[root@ostack-228-32 ~]#  
[root@ostack-228-32 ~]#  
[root@ostack-228-32 ~]#  
[root@ostack-228-32 ~]# df -Th  
Filesystem      Type      Size Used Avail Use% Mounted on  
devtmpfs        devtmpfs  252G  0  252G  0% /dev  
tmpfs           tmpfs     252G  0  252G  0% /dev/shm  
tmpfs           tmpfs     252G  19M  252G  1% /run  
tmpfs           tmpfs     252G  0  252G  0% /sys/fs/cgroup  
/dev/mapper/centos-root xfs       300G  4.0G  296G  2% /  
/dev/sda1       xfs       19G  192M  18G  2% /boot  
tmpfs           tmpfs     51G  0  51G  0% /run/user/0  
tmpfs           tmpfs     60M  0  60M  0% /var/log/rtlog  
/dev/sdb1       xfs       22T  34M  22T  1% /data  
[root@ostack-228-32 ~]# vim /etc/fstab
```