



Phân vùng ổ cứng định dạng Linux **LVM**

1. Tạo mới phân vùng ổ cứng LVM

Kiểm tra package **lvm2** đã cài chưa

```
# rpm -qa | grep lvm2
```

Chia hai phân vùng **/dev/sdb1** và **/dev/sdb2**

```
# fdisk /dev/sdb
```

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

Command action

e extended

p primary partition (1-4)

p

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

First cylinder (1-2610, default 1): **enter**

Using default value 1

Last cylinder, +cylinders or +size{K,M,G} (1-2610, default 2610): **+10G**

Command (m for help): **t**

Selected partition **1**

Hex code (type L to list codes): **8e**

Changed system type of partition 1 to 8e (Linux LVM)

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

Command action

e extended

p primary partition (1-4)

p

Partition number (1-4): **2**

First cylinder (1307-2610, default 1307):

Using default value 1307

Last cylinder, +cylinders or +size{K,M,G} (1307-2610, default 2610):

Using default value 2610

Command (m for help): **t**

Partition number (1-4): **2**

Hex code (type L to list codes): **8e**

Changed system type of partition 2 to 8e (Linux LVM)

Command (m for help): **w**

The partition table has been altered!

```
# fdisk -l
```



Tạo mới **physical volume**

```
# pvcreate /dev/sdb1
```

```
# pvdisplay
```

Tạo mới **volume group**

```
# vgcreate vg_centos /dev/sdb1
```

Volume group "vg_centos" successfully created

```
# vgdisplay
```

Tạo mới **logical volume**

```
# lvcreate -l 100%FREE -n lv_data vg_centos
```

Logical volume "lv_data" created

```
# lvdisplay
```

--- Logical volume ---

LV Path /dev/vg_centos/lv_data

Format và mount **logical volume**

```
# mkfs.ext4 /dev/vg_centos/lv_data
```

```
# mkdir /data
```

```
# mount /dev/vg_centos/lv_data /data
```

```
# df -hT
```

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/mapper/vg_centos-lv_data	ext4	9.8G	23M	9.2G	1%	/data

2. Mở rộng phân vùng ổ cứng LVM

```
# pvcreate /dev/sdb2
```

Physical volume "/dev/sdb2" successfully created

```
# vgdisplay
```

--- Volume group ---

VG Name vg_centos

```
# vgextend vg_centos /dev/sdb2
```

Volume group "vg_centos" successfully extended

```
# pvscan
```

PV /dev/sdb1	VG vg_centos	lvm2 [10.00 GiB / 0 free]
PV /dev/sdb2	VG vg_centos	lvm2 [9.98 GiB / 9.98 GiB free]



```
# lvsdisplay
```

```
--- Logical volume ---
```

```
LV Path      /dev/vg_centos/lv_data
```

```
LV Name      lv_data
```

```
VG Name      vg_centos
```

```
# lvextend /dev/vg_centos/lv_data /dev/sdb2
```

```
Size of logical volume vg_centos/lv_data changed from 10.00 GiB (2560 extents) to 19.98 GiB (5116 extents).
```

```
Logical volume lv_data successfully resized
```

```
# resize2fs /dev/vg_centos/lv_data
```

```
resize2fs 1.41.12 (17-May-2010)
```

```
Filesystem at /dev/vg_centos/lv_data is mounted on /data; on-line resizing required
```

```
old desc_blocks = 1, new_desc_blocks = 2
```

```
Performing an on-line resize of /dev/vg_centos/lv_data to 5238784 (4k) blocks.
```

```
The filesystem on /dev/vg_centos/lv_data is now 5238784 blocks long.
```

```
# df -hT
```

```
/dev/mapper/vg_centos-lv_data
```

```
ext4 20G 28M 19G 1% /data
```