

# 10. Resize LVM Linux

To mount `sdb` to an LVM (Logical Volume Manager) on Linux, you'll first need to prepare the disk and create the necessary partitions and volumes. Here's a step-by-step guide:

1. **Partition the disk (`sdb`):** You can use a partitioning tool like `fdisk` or `parted` to create partitions on `sdb`. For example, you can create a single partition spanning the entire disk.

bash

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```
sudo fdisk /dev/sdb
```

Then follow the prompts to create a new partition (`n`), choose primary partition, select the default partition number, and use the entire disk (`+1T`).

2. **Create a Physical Volume (PV):** After partitioning, you need to initialize the partition as a physical volume for LVM.

bash

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```
sudo pvcreate /dev/sdb1
```

3. **Extend the Volume Group (VG):** If you want to extend an existing volume group, you can use `vgextend`. If you want to create a new one, you can use `vgcreate`. For extending an existing VG, you might have to check its name.

bash

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```
sudo vgextend ubuntu-vg /dev/sdb1
```

Replace `ubuntu-vg` with the name of your volume group.

4. **Create a Logical Volume (LV):** Once the volume group is extended, you can create a logical volume within it.

perl

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```
sudo lvcreate -l 100%FREE -n sdb-lv ubuntu-vg
```

This creates a logical volume named `sdb-lv` using all available space in the volume group `ubuntu-vg`.

5. **Format the Logical Volume:** You'll need to format the newly created logical volume with a file system. Replace `ext4` with your desired file system type.

bash

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```
sudo mkfs.ext4 /dev/ubuntu-vg/sdb-lv
```

6. **Mount the Logical Volume:** Create a mount point and mount the logical volume.

bash

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```
sudo mkdir /mnt/sdb
```

```
sudo mount /dev/ubuntu-vg/sdb-lv /mnt/sdb
```

Now your `sdb` disk should be mounted to `/mnt/sdb` as an LVM.

Remember to replace volume group and logical volume names (`ubuntu-vg` and `sdb-lv` respectively) with your actual ones. Also, ensure you understand the implications of these operations on your system before proceeding.

## Resize

```
lvextend -l +100%FREE /dev/ubuntu-vg/ubuntu-lv
```

## Eksekusi perubahan

```
resize2fs /dev/mapper/ubuntu-vg-ubuntu-lv
```

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### Revision #2

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