

# Resizing partitions

Why the fuck is there no one that can tell you how tf it works?

- How to do it
- How to online grow a ext4 partition

# How to do it

## Preperations

You need to be in a rescue system or have the disk unmounted. That is non negotiable!  
Also make a snapshot/backup of you system!

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## Resizing

1. `e2fsck -f /dev/sdXY`
2. `resize2fs /dev/sdXY XG`
3. `fdisk /dev/sdX`

In fdisk you need to:

1. Delete the old partition (d)
2. Recreate it (n)
  1. Use +XG to resize it to the GB amount you choose when using `resize2fs`
3. Write it (w)

Now you should have a working partition that is resized to the amount you wanted.

# How to online grow a ext4 partition

This tutorial uses Arch Linux so package names might vary

1. Install cloud-guest-utils which includes growpart
2. Backup your partition table so you can recover if needed  
`sudo sfdisk -d /dev/sda > partition_bak.dmp`
3. Use growpart to grow the partition  
`growpart /dev/sda 2`
4. Use resize2fs to grow your filesystem  
`resize2fs /dev/sda2`

Now you should have a ext4 partition that spans the entire rest of your drive.