System expansion

1. Problem

After burning the image using a USB flash drive or SSD that is larger than the image memory, part of the free memory will be unavailable, resulting in an error message of insufficient space or failure to run large projects.

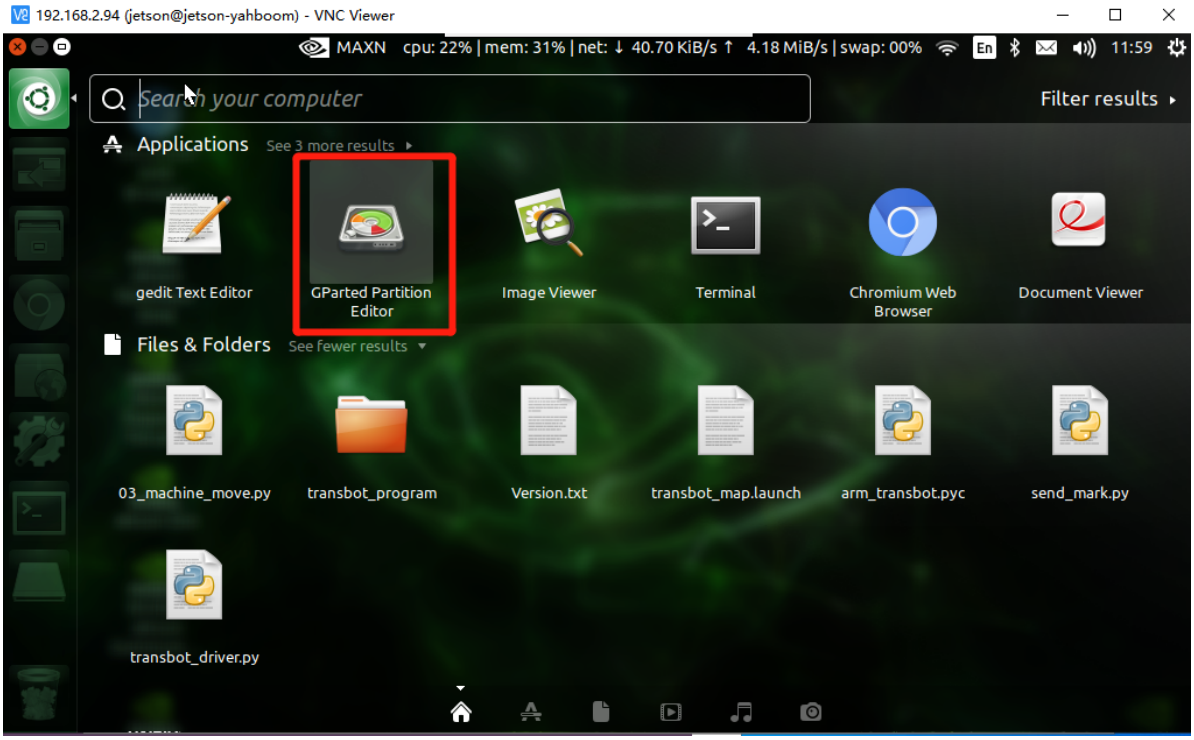
Note: This tutorial is only for users who burn the image by themselves. If there is a factory image in the USB flash drive or SSD, you can skip this tutorial. The expansion method of USB flash drives and SSDs is the same. This section takes Jetson Nano (U disk) as an example.

2. Solution

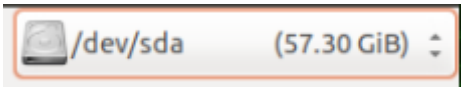
Install the expansion software and use the expansion software to expand the capacity.

```
sudo apt install gparted
```

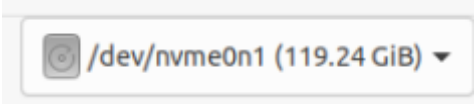
Open the software



The Jetson Nano system found the [/dev/sda] device.

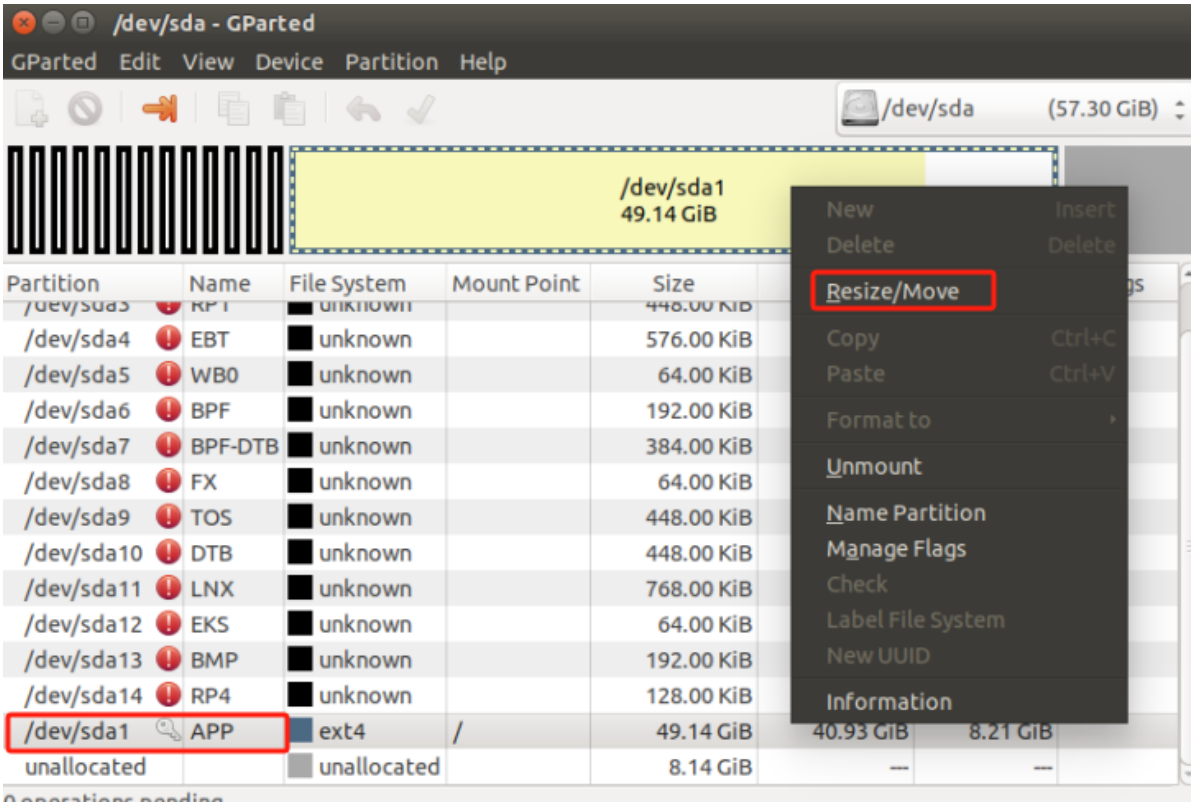


If the Jetson Orin NX/Orin Nano motherboard uses a solid-state drive, the device number is [/dev/nvme0n1]

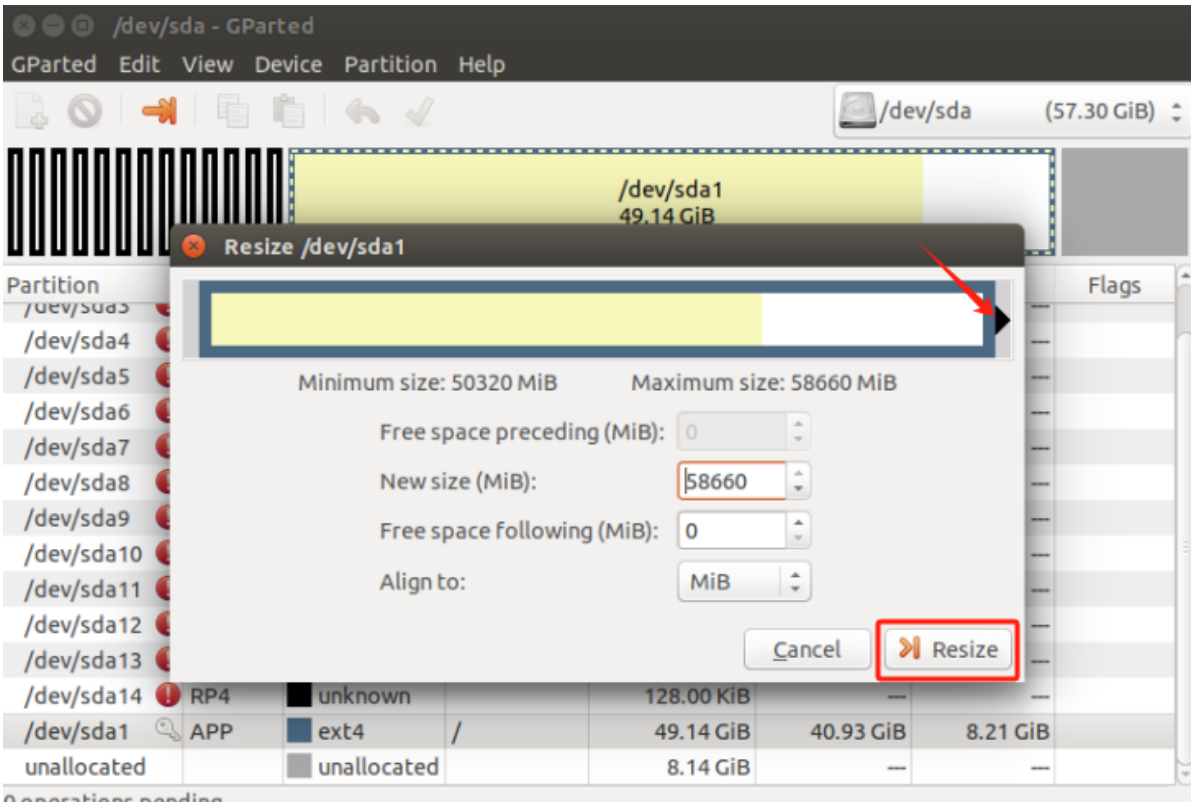


Note that in this step, you must confirm that the hard disk device number you are operating is correct.

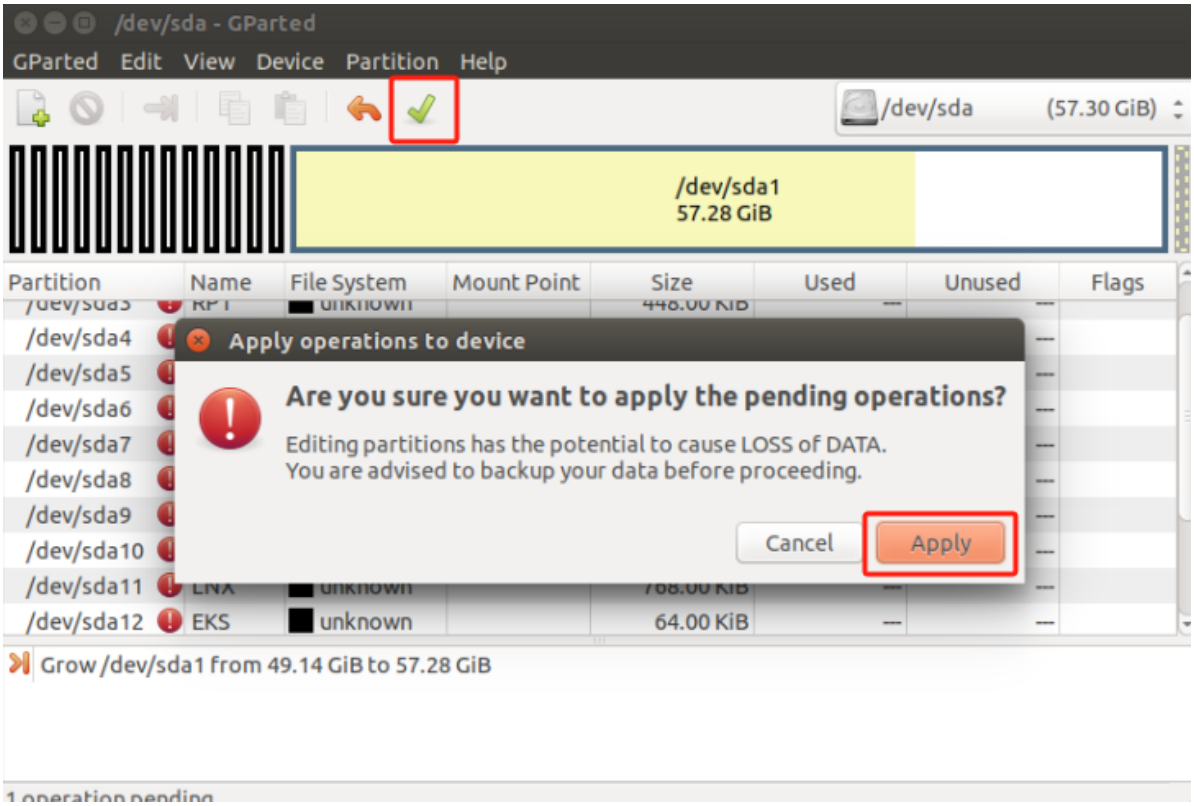
Select the device primary partition [APP], right-click and select [Resize/Move].



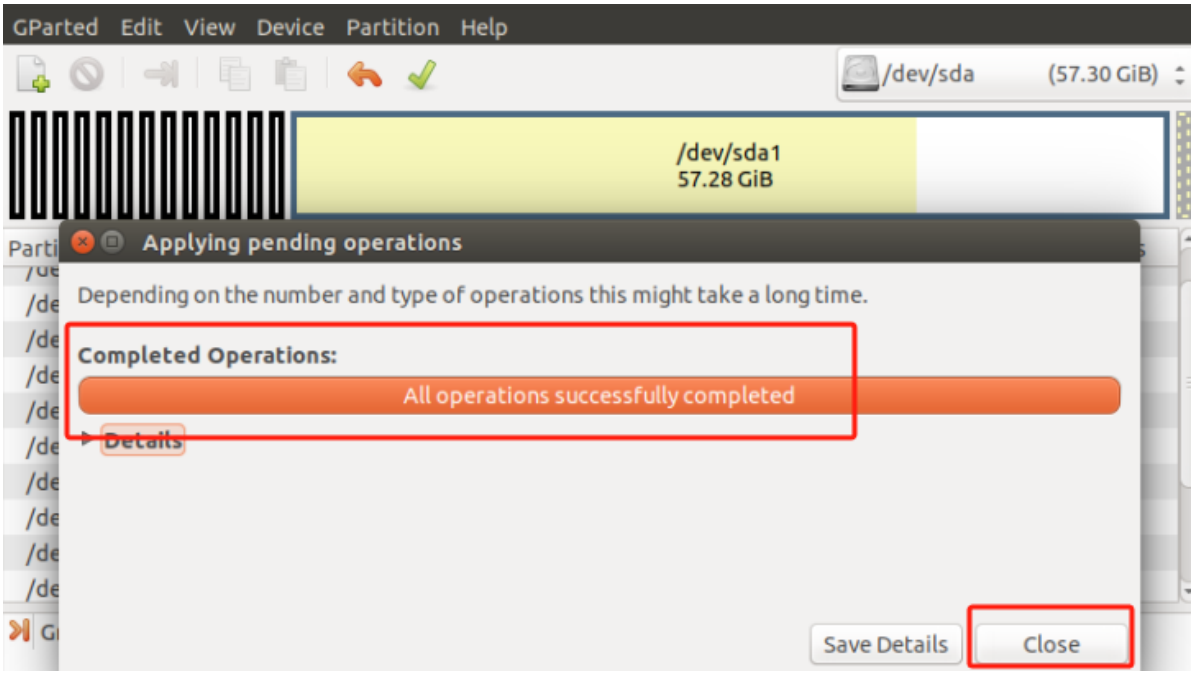
Pull the right box to the top until the gray area turns completely white->Resize



Click √ below the function bar -> Apply



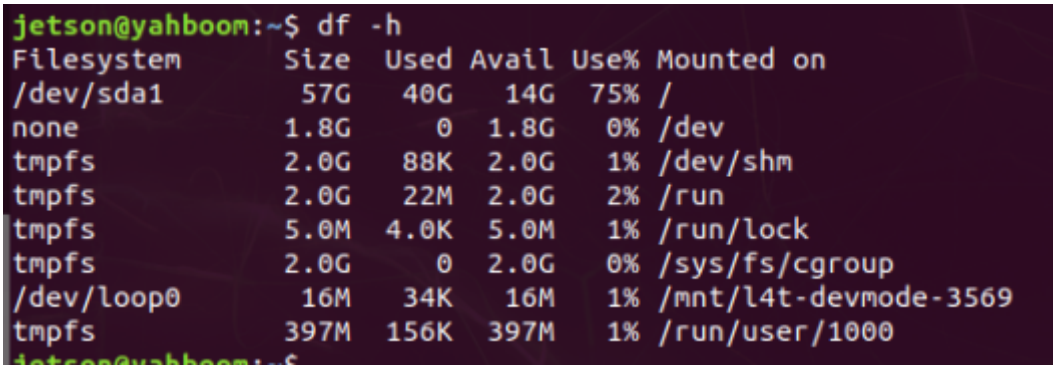
Capacity expansion completed!



Use the command to query and verify in the terminal

```
df -h
```

Check the space after expansion


jetson@yahboom:~$ df -h
Filesystem Size Used Avail Use% Mounted on
/dev/sda1 57G 40G 14G 75% /
none 1.8G 0 1.8G 0% /dev
tmpfs 2.0G 88K 2.0G 1% /dev/shm
tmpfs 2.0G 22M 2.0G 2% /run
tmpfs 5.0M 4.0K 5.0M 1% /run/lock
tmpfs 2.0G 0 2.0G 0% /sys/fs/cgroup
/dev/loop0 16M 34K 16M 1% /mnt/l4t-devmode-3569
tmpfs 397M 156K 397M 1% /run/user/1000