Last update : 06/24/2006

How to resize partition, step by step
The livecd-howto

GPARTED GENERAL DOCUMENTATION

(The doc size is 4MB)

Please, first have a look at the General introduction !

-1- Getting and installing the software

GParted cannot be used for logical volume type of disk organizations (yet). When your system was installed using Logical volumes as the file system management, use the LVM software and it's built-in facilities.

-a- Easier way

Creating and managing partitions is not something that is typically done every day. Therefore, a good idea is to read this guide once, to get comfortable with the concepts and some of the panels that will appear. While reading this guide, you can initiate the download of the software. It is possible that the gparted program is already installed on your system, in which case, a download is not necessary.

If your linux system is "up and running" then use the appropriate tool to download the software. If it is not "up and running" you would download a "live CD" iso image, and create a bootable cd for your system.

Some distributions are Debian based, and use a software called *apt*. Others are RedHat based and use a software called *yum* (*yumex*, *kyum*), Gentoo uses *emerge*, ...etc to download and install gparted. If your distribution is an older one, yum may not be installed. In this case you would use rpm (Red Hat Package Manager) from http://rpm.pbone.net/. Then, skip the two next lines.

yum install gparted
or
#apt-get install gparted

If after executing the yum or apt command you receive the message "nothing to do" or something similar, it is likely that the location that you chose from which to get the software does not have it. In this case, if you have a Fedora or Red Hat distro, which is based on the rpm program, use the following command to download and install a copy :

#rpm -Uvh gparted.xxx.rpm (where xxx is one's hardware architecture, typically "I386", but in two years from now, more likely to be "x64")

-b- For the experienced

If you prefer to get the very latest (cutting-edge) gparted version, download the tar.bz2 file, and compile the contents. Few dependencies are needed ; all dependencies will be added when installing parted-devel and gtkmm24 (co-requisites). But then, you need to enable the development baseurl in /etc/yum.repos.d/source.list, or /etc/apt/apt.d/sources.list :

yum install gtkmm24 parted-devel

or

apt-get install gtkmm24 parted-devel

Download the file into the directory of choice. In this example we choose the /tmp directory. Then follow the instructions :

cd /tmp
#unpack the tarball:
tar -xjf gparted-x.y.tar.bz2
cd gparted-x.y/
./configure --prefix=/usr
make
su -
make install
that's all. Problems may arise if you haven't the right dependencies

Following the build, change into the directory and run gparted from a terminal :

cd /tmp/gparted-x.y/src
./gparted
And now the fun begins

-2- General information

When GPARTED runs , this window is opened, and drives are scanned

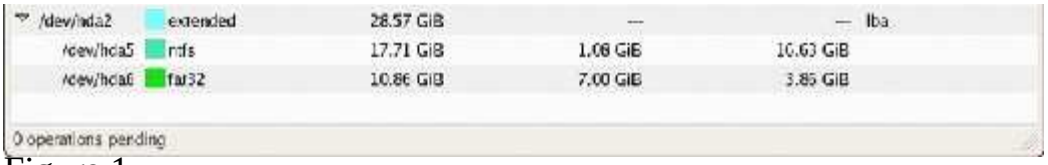


Figure 1

If you click the ***Gparted*** menu keyword (at the top left), a pop down is presented. You can select to refresh the display of the drives on your system. As well, a keyboard shortcut is available to easily refresh
the screen information.
With the second choice, you can choose
the hard drive whose partitions you want to modify.
This is useful if you have more than one hard drive.
The third option under Gparted menu keyword is used
to obtain more information.

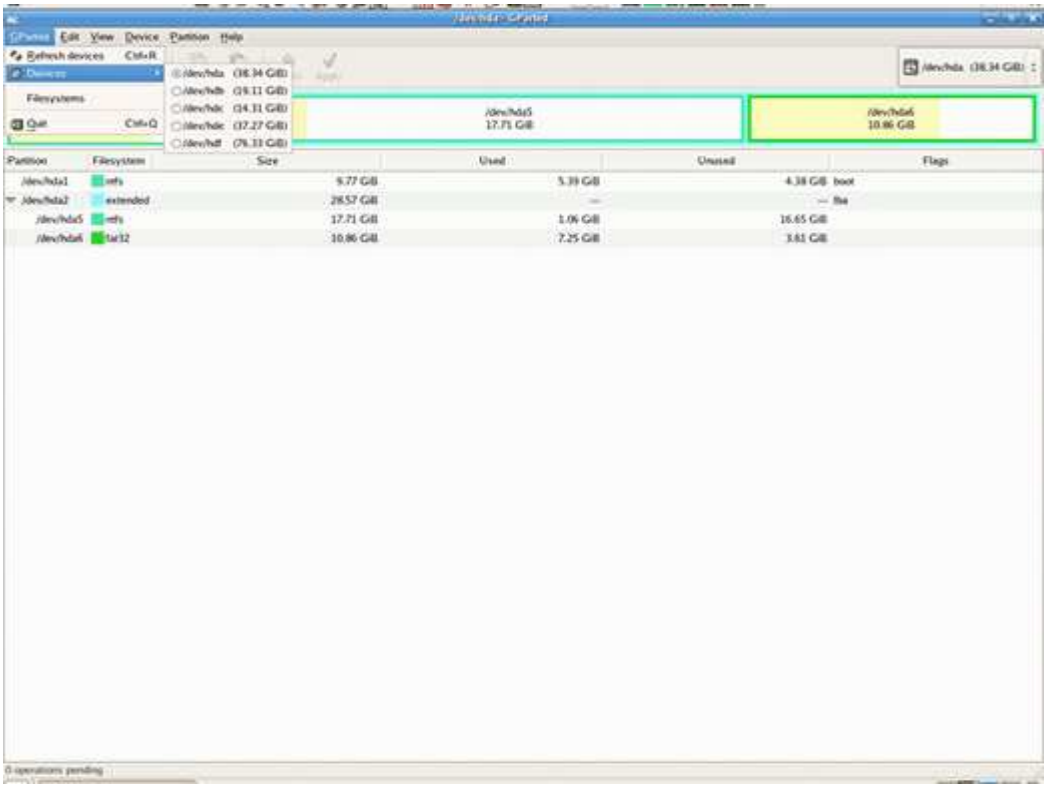


Figure 2

It opens a new window from which you can see the supported file types and some partition editing options.

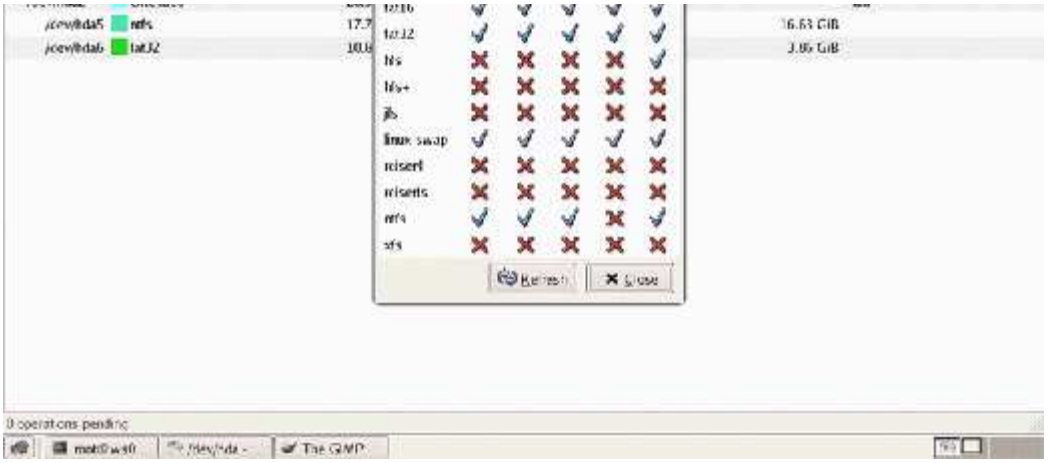


Figure 3

The ***Edit*** menu is second from the left. It shows two greyed out functions which are quite useful: Undo, and Apply. These options may also be seen
in the toolbar. To activate them, you must choose a partion you wish to modify.

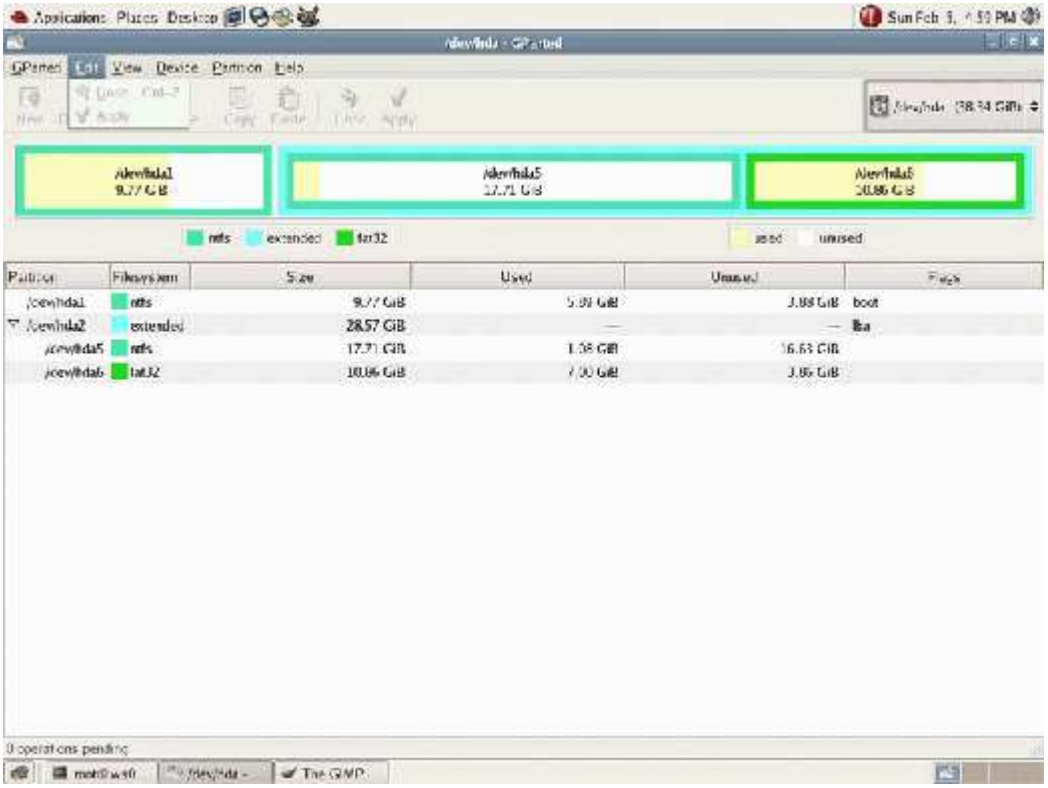
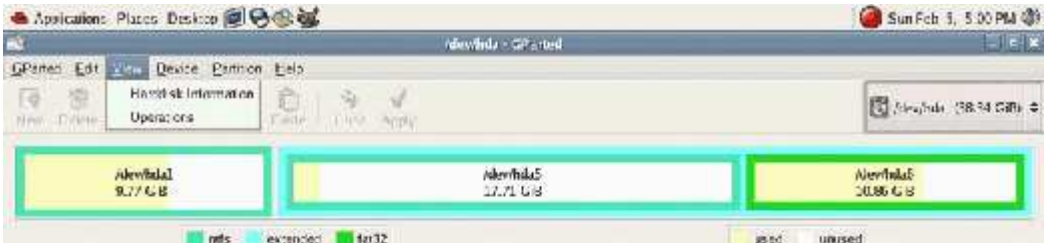


Figure 4

The ***View*** menu allows you to access/view other areas :



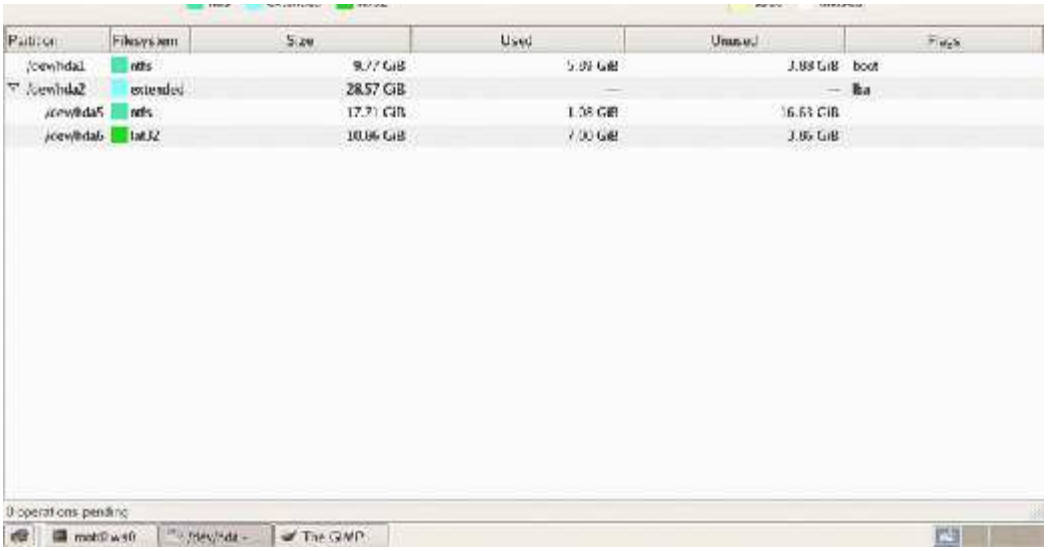


Figure 5

Harddisk Information : On the far left, the *hardisk information* panel displays details about the hard disk, such as Model, Size etc. This panel is most useful in a multi harddisk system, where the information is used to confirm that the hard disk being examined is the one that is wanted.

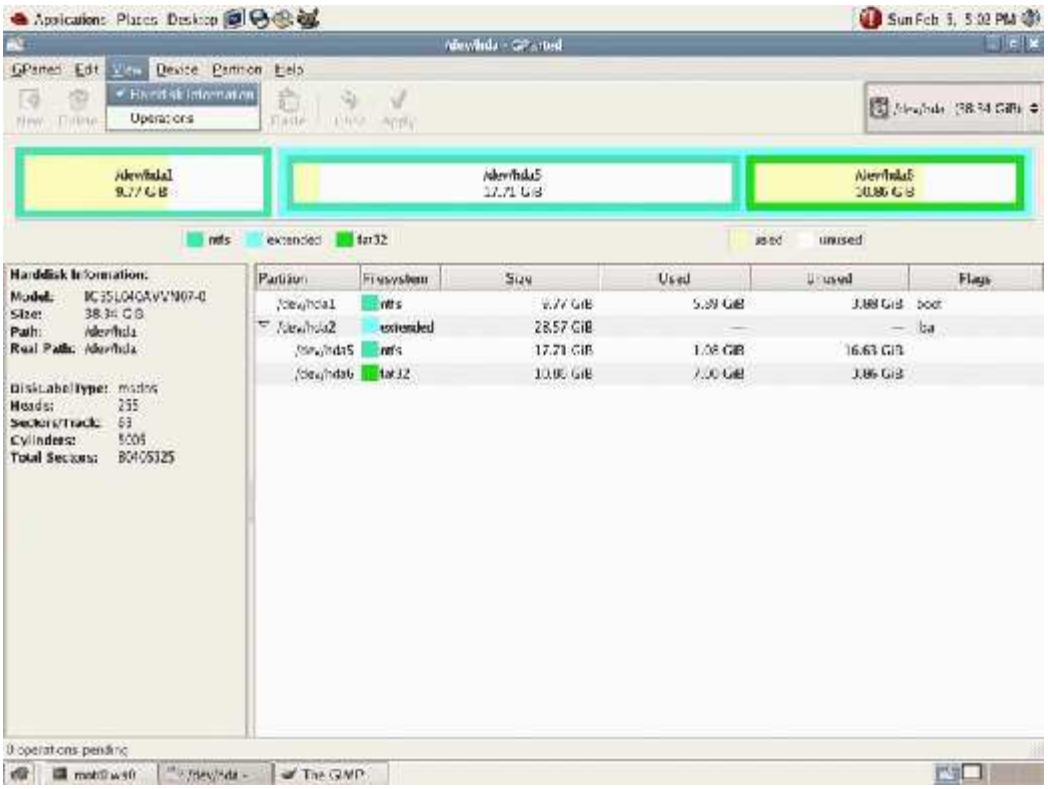


Figure 6

...And ***Operations*** : At the footing window is a list of pending operations. The information is useful as it provides a indication of the number of pending operations.

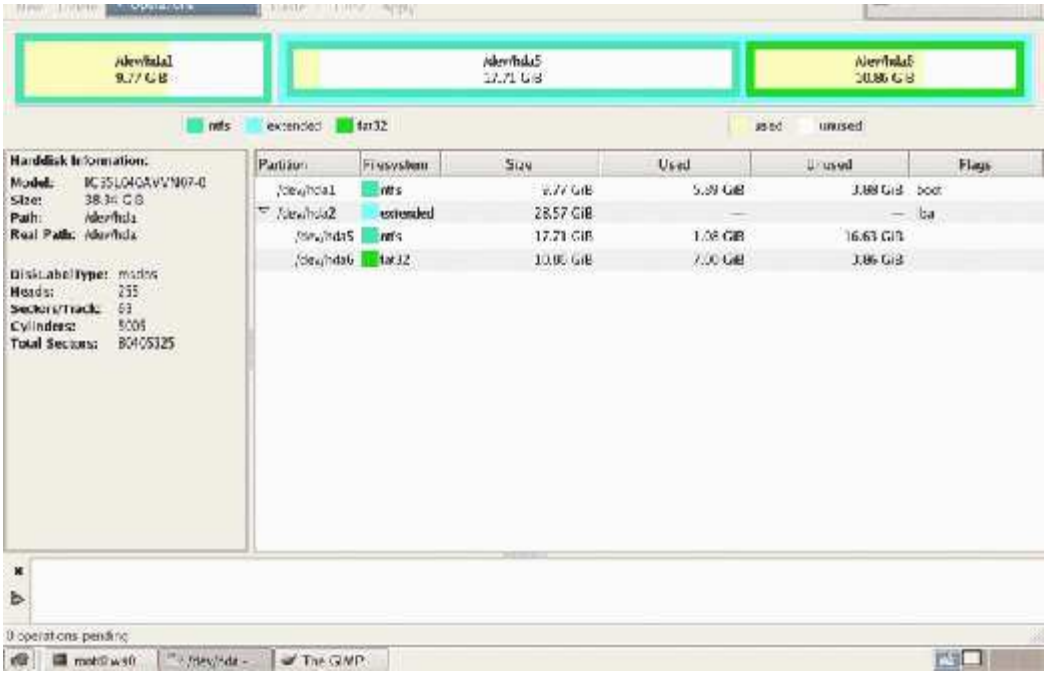


Figure 7

Device allows you to Set a Disk label...
If the current disk label is inappropriate, you may change it using this option.

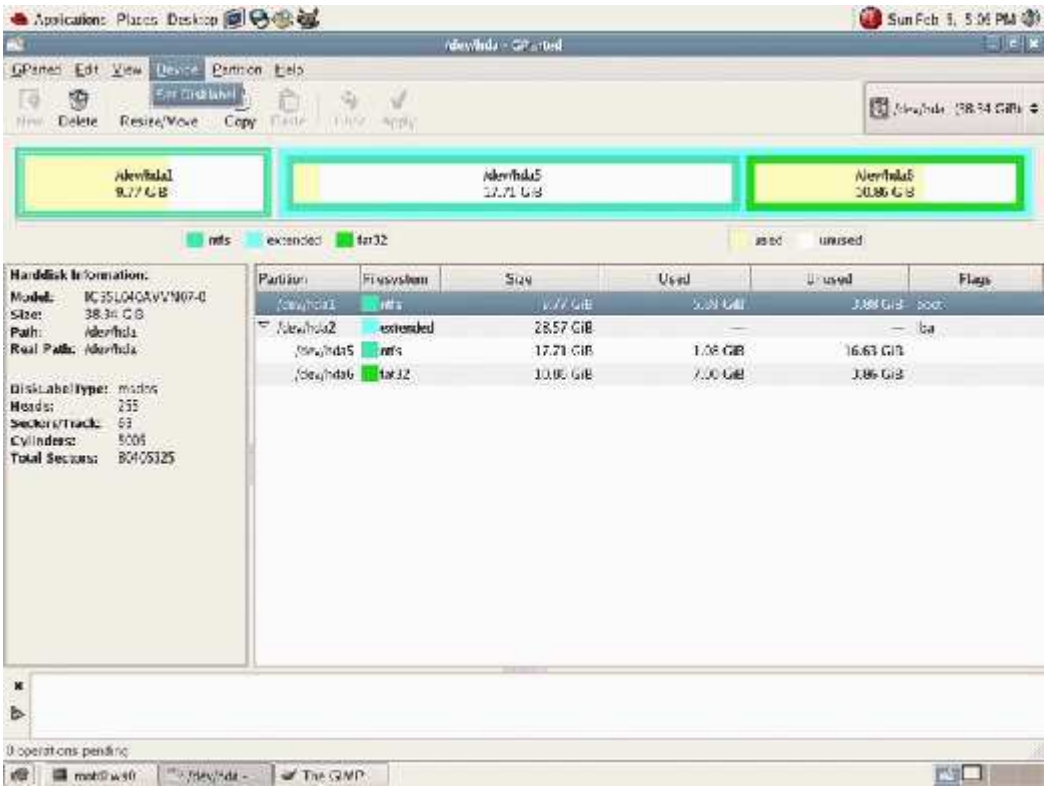


Figure 8

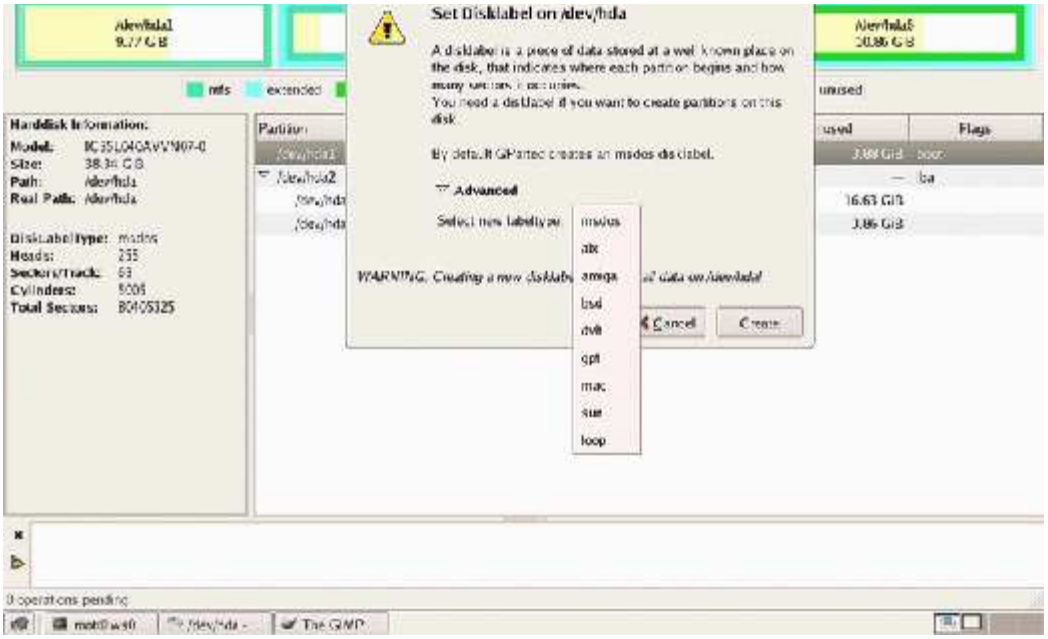


Figure 9

The ***Partition*** menu is of upmost importantce. It allows you to do many operations, some of which are dangerous. ***Delete*** is selected if you want to delete a partition. To perform the delete, you must first select the partition.

Resize/Move is a useful function ; just have a look there...

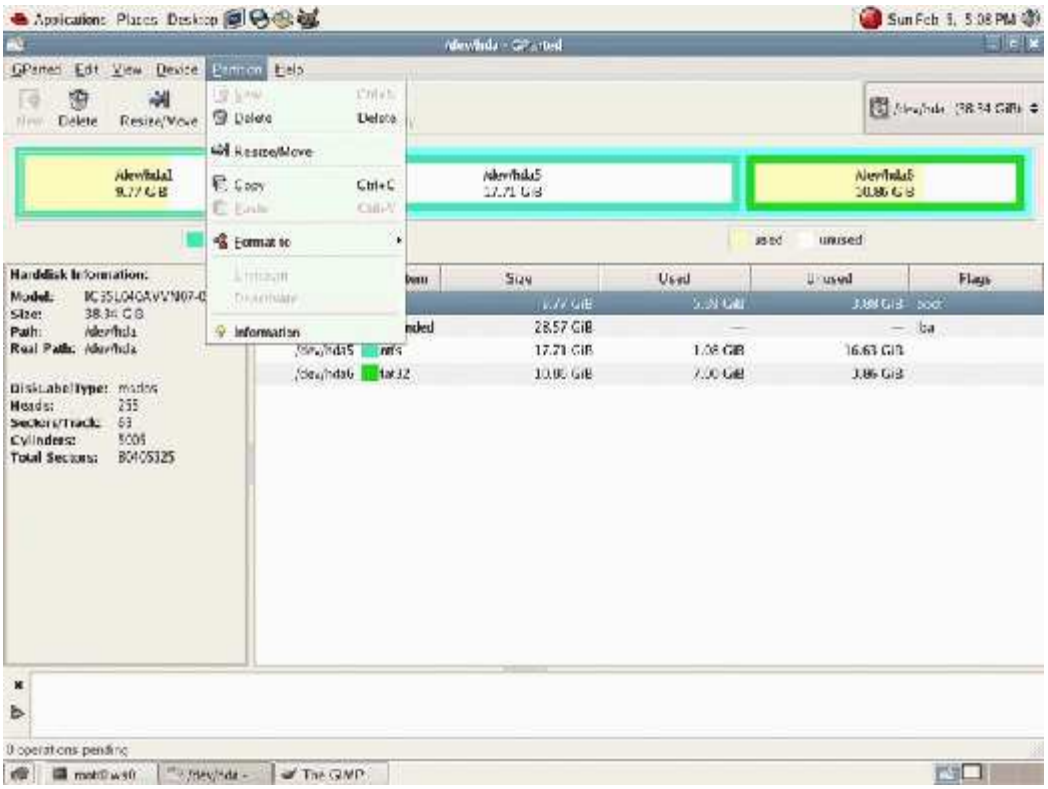


Figure 10

You may also format any partition to a file system which is supported in the menu. (as shown in fig. 3 above)

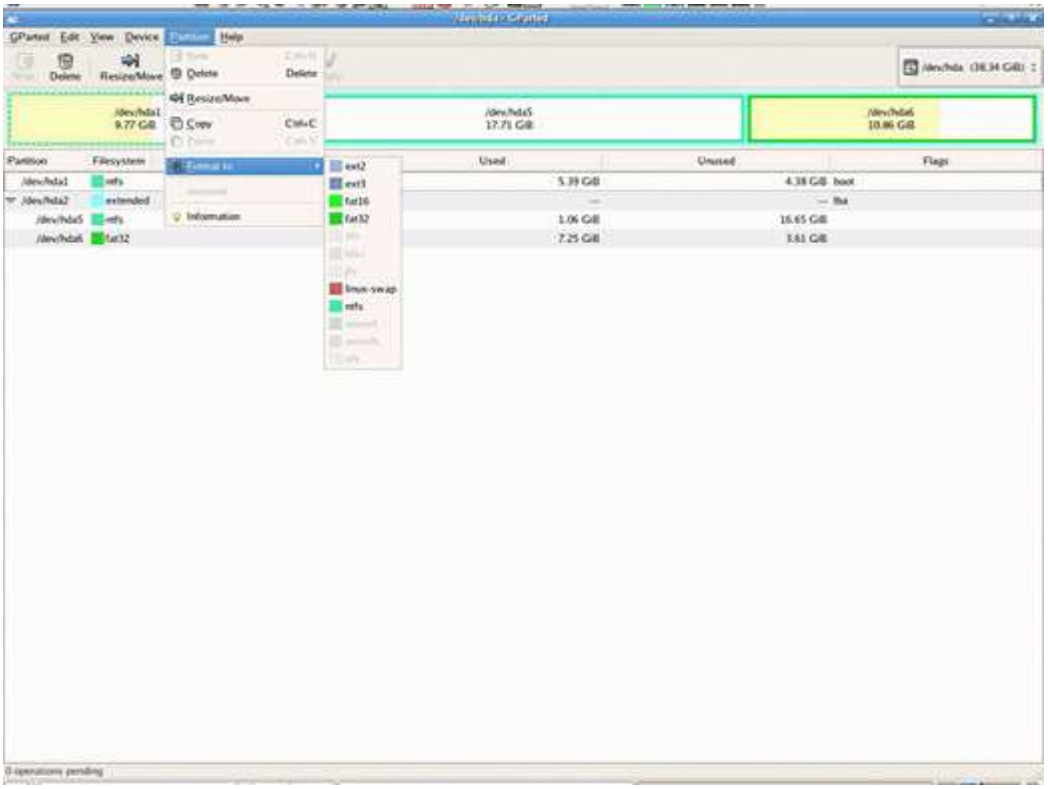


Figure 11

The last choice gives informations about the selected partition.

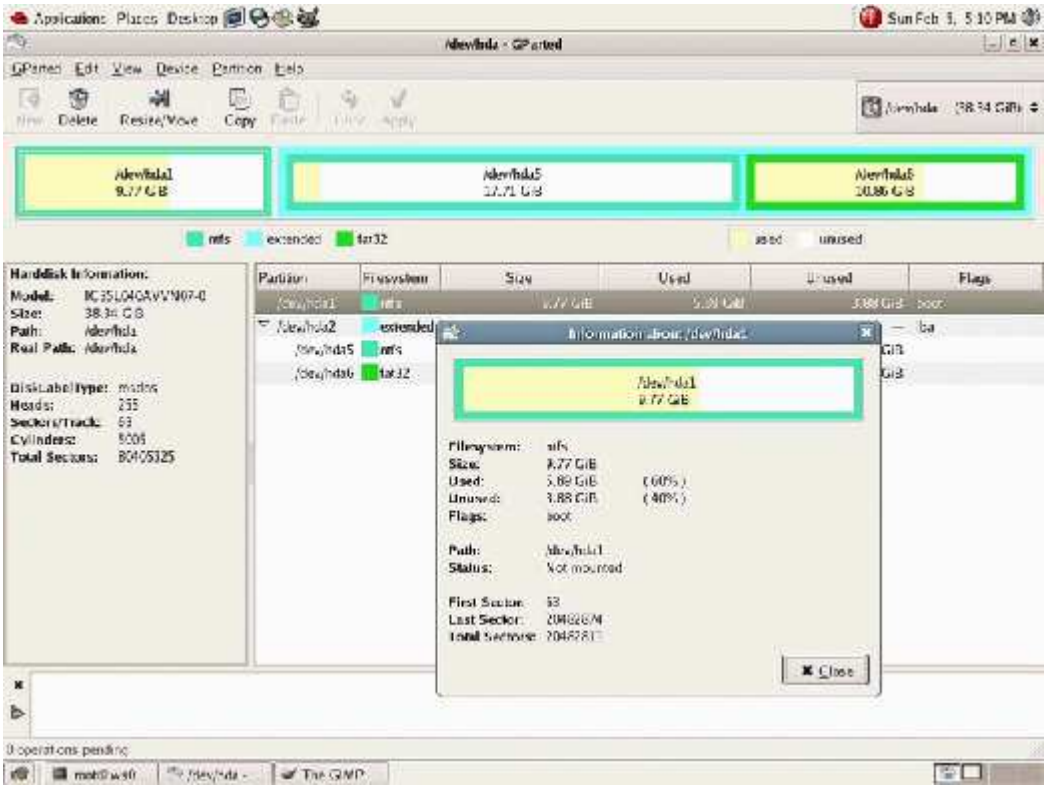


Figure 12

And if you clic on ***Help***.... you will not find anything there as it is not yet implemented :)
(Gparted 0.2)

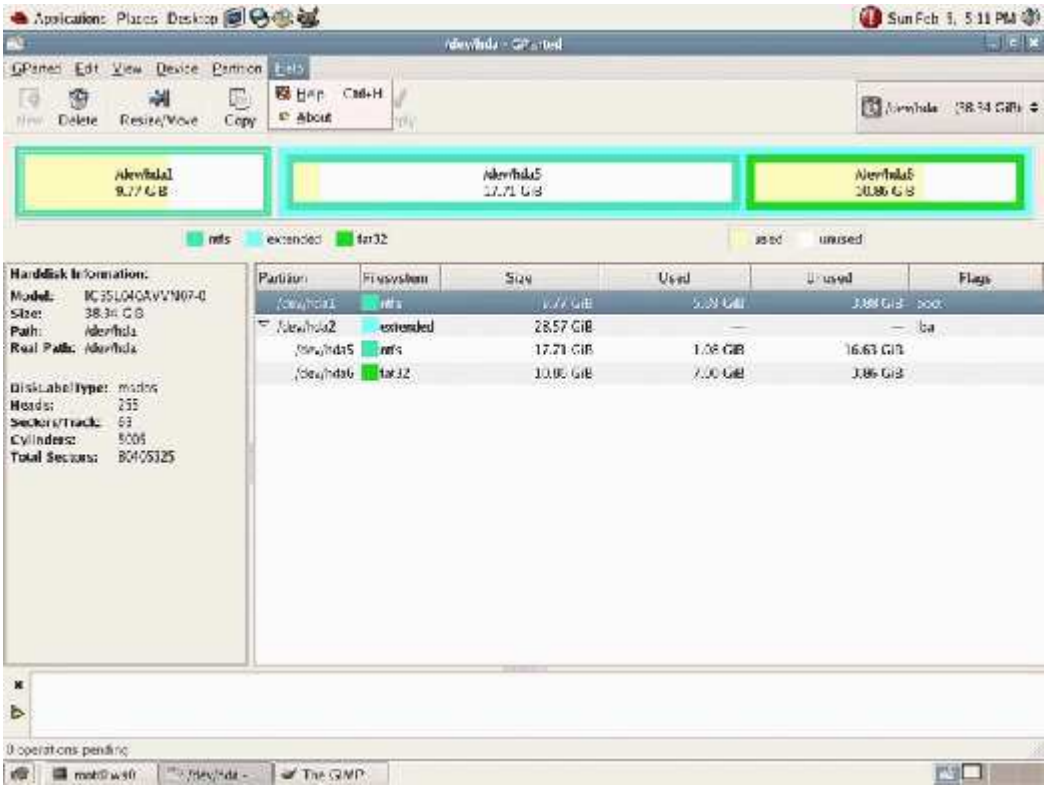


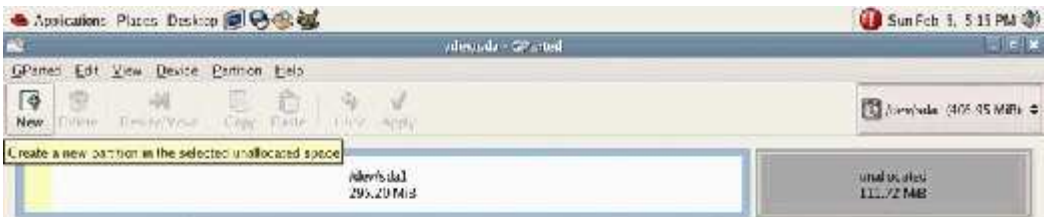
Figure 13

-2- Few operations...

- Creating a new partition

On the toolbar, the ***New*** button allows you to create a new partition, if you have already selected an unallocated area !

N.B : If you run fedora core 5, and want to create a new partition on usb drive, you first must -- for the moment -- disable the automount fonction : open a shell and type "gnome-volume-properties", unckeck the first line, and close; a best solution is in study ! If you have any workaround, please, send us your opinion...



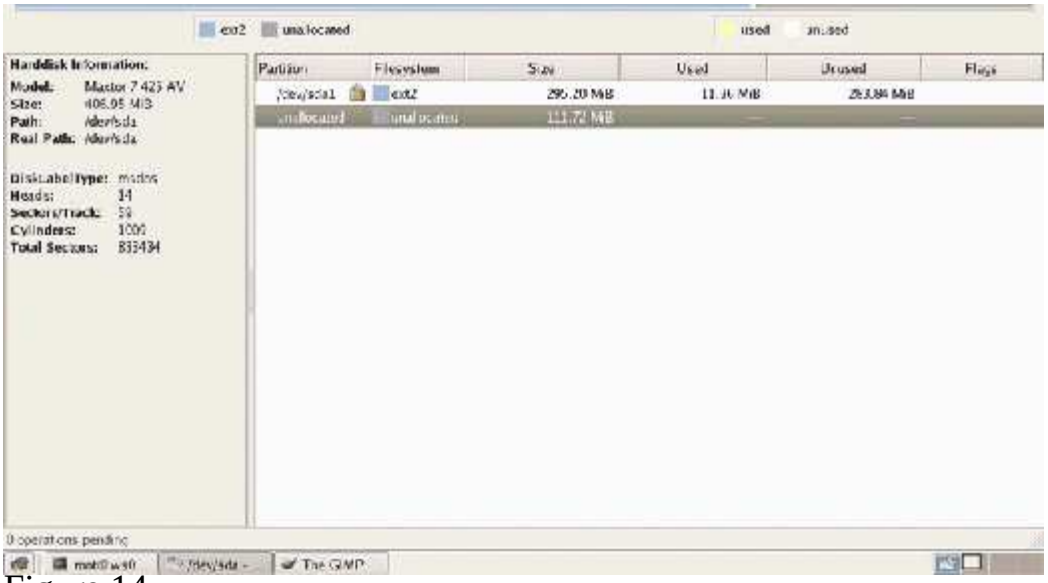


Figure 14

A new window appears and lets you chose the size you want ...

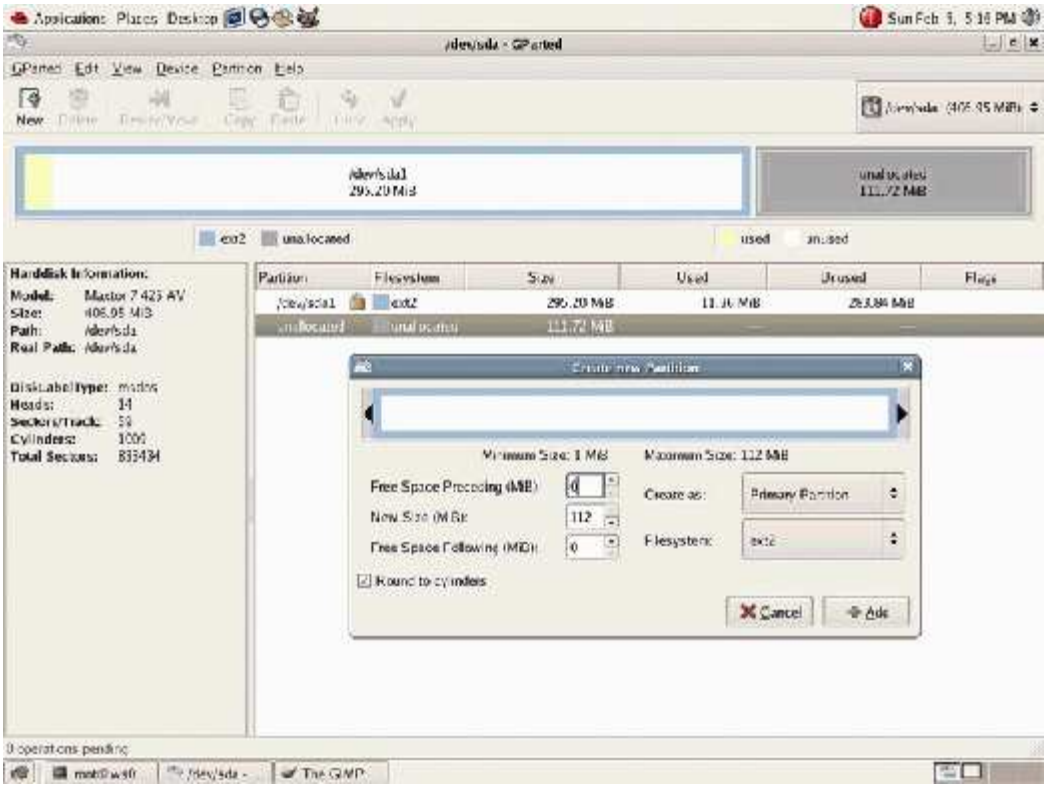


Figure 15

... as a Primary, extended or logical partition ...

Figure 16

... and the file system.

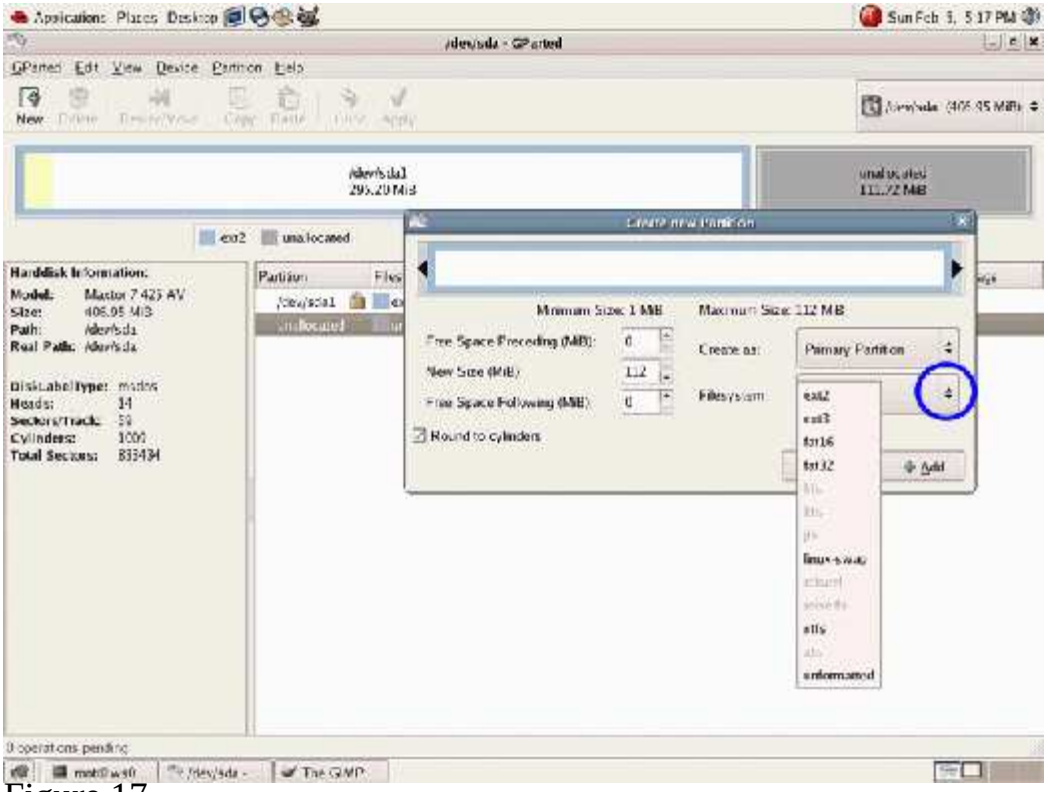
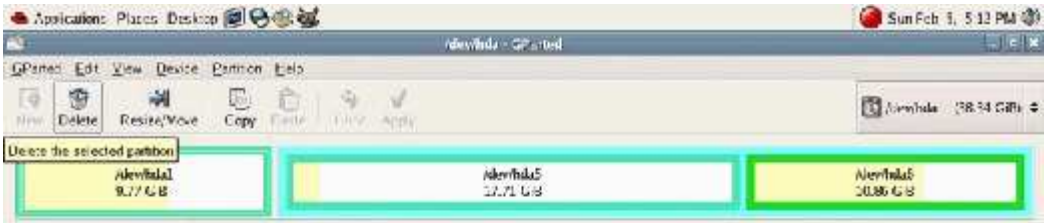


Figure 17

-Deleting a partition

The second icon is for deleting the selected partition . Give it a try ;)...



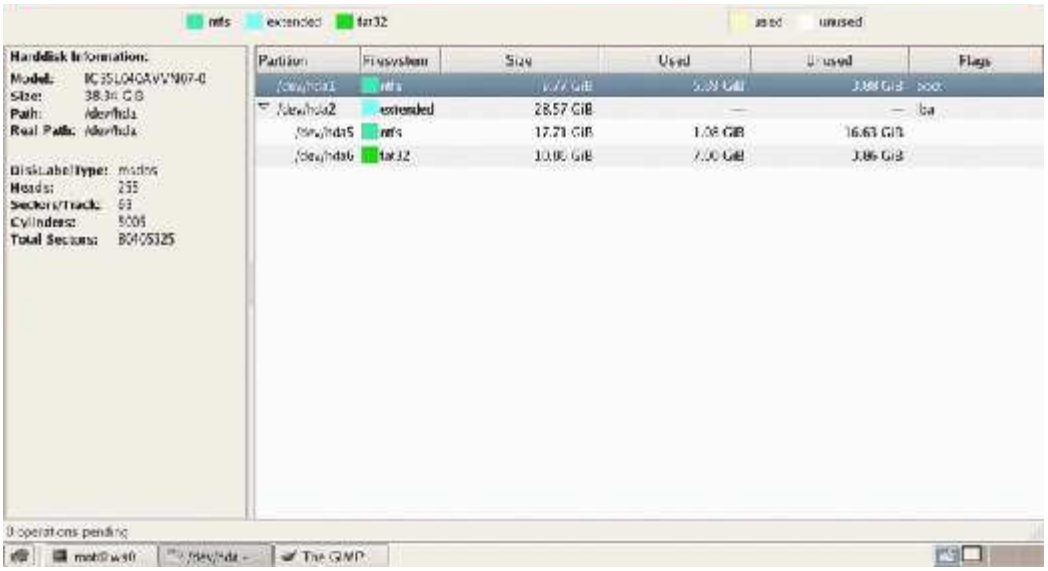


Figure 18

... but don't forget click the "***undo***" icon, otherwise you will destroy all the data on the partition you have selected ! If you really want to delete it, just click "***apply***".

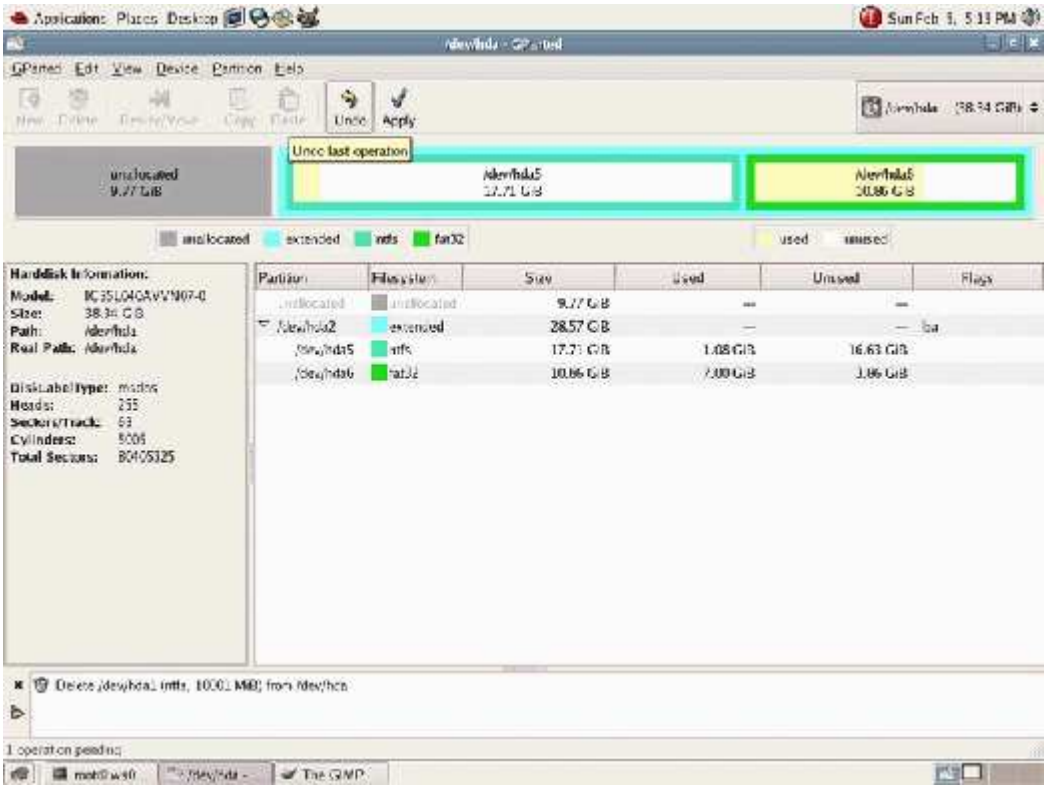


Figure 19

-Resizing a partition

When you want to resize a partition you have selected, click "***Resize/Move***" button : a new window pops up :). Use the mouse to reduce (or grow) the partition (blue circle), or if you prefer, use the

arrows in the green circle.

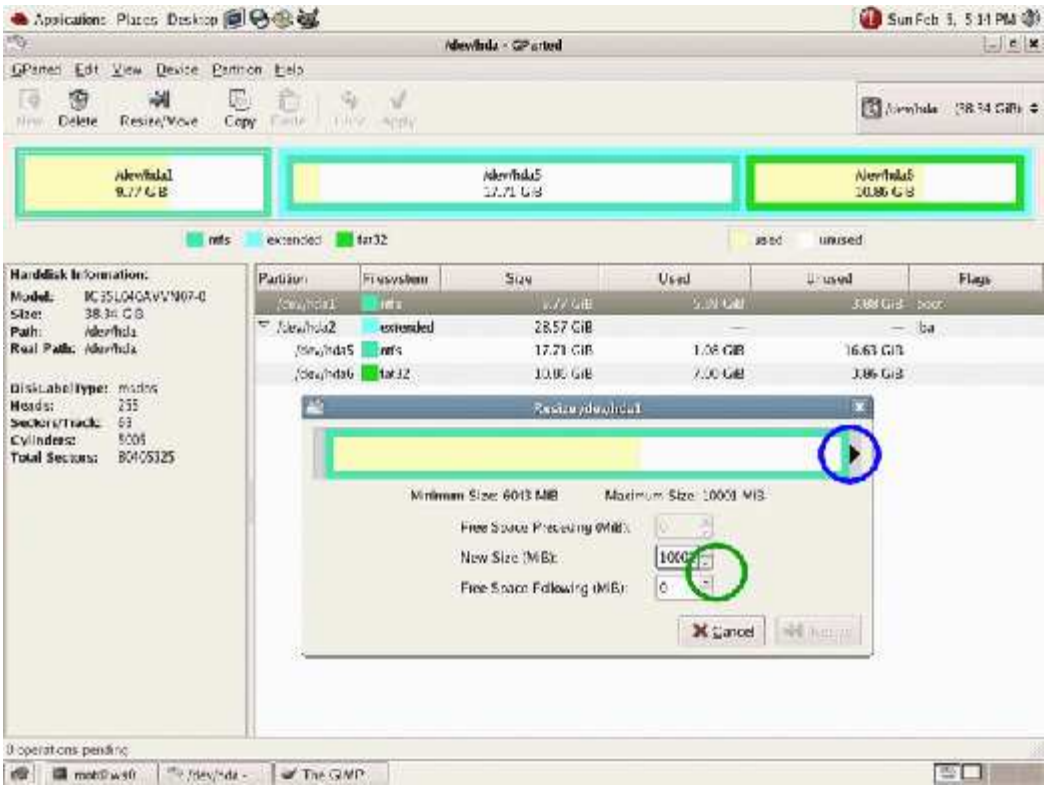


Figure 20

-Copying a partition

Let’s have a look on the ***copy*** fonction ! To activate it, you must first select the partition you want to copy ! (N.B. : the partition must be unmounted).

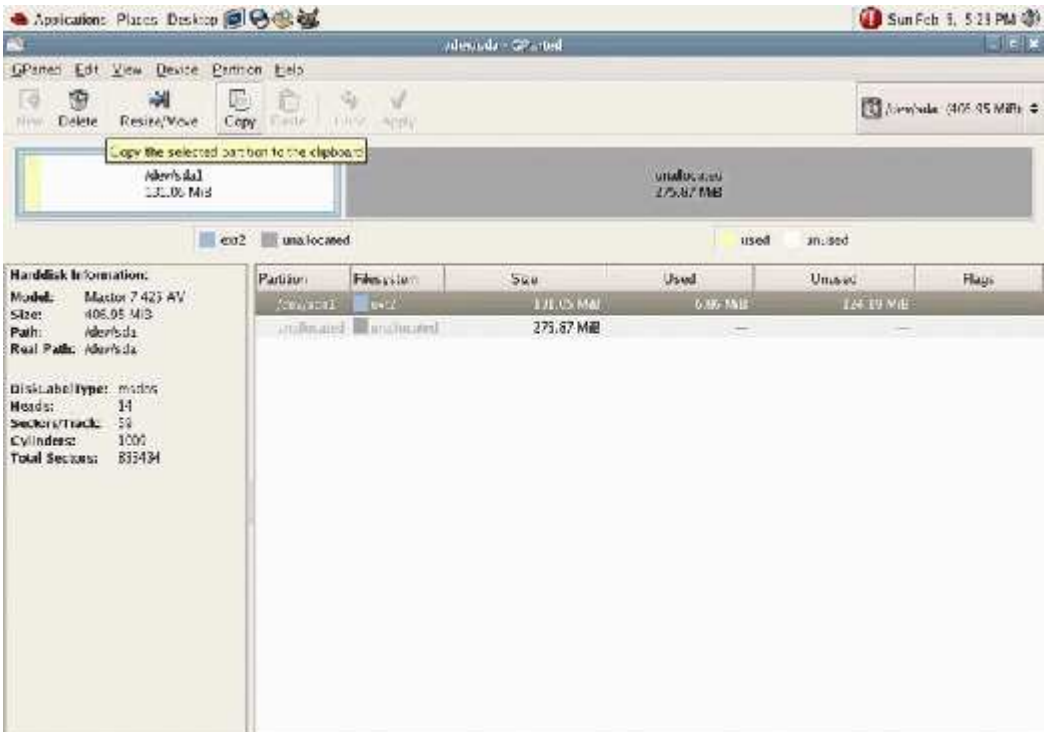


Figure 21

Right-click on the partition selected and click ***Unmount***.

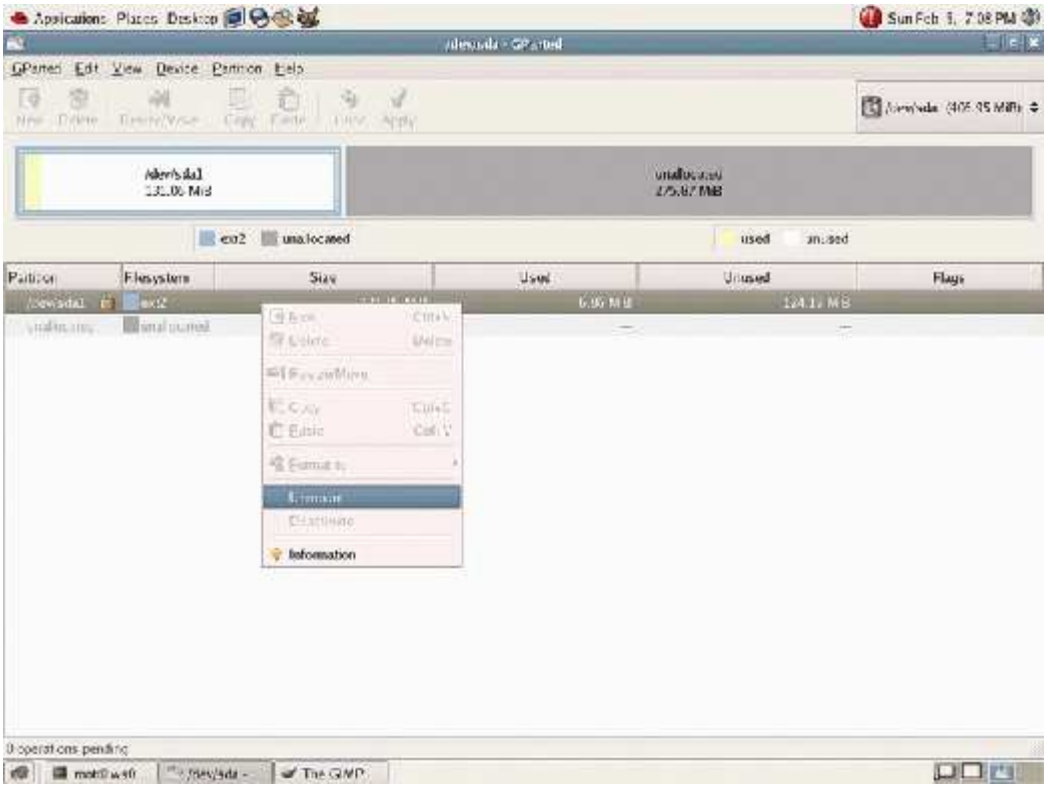


Figure 22

After you have copy the partition, you must choose an unallocated area to activate ***Paste*** button.

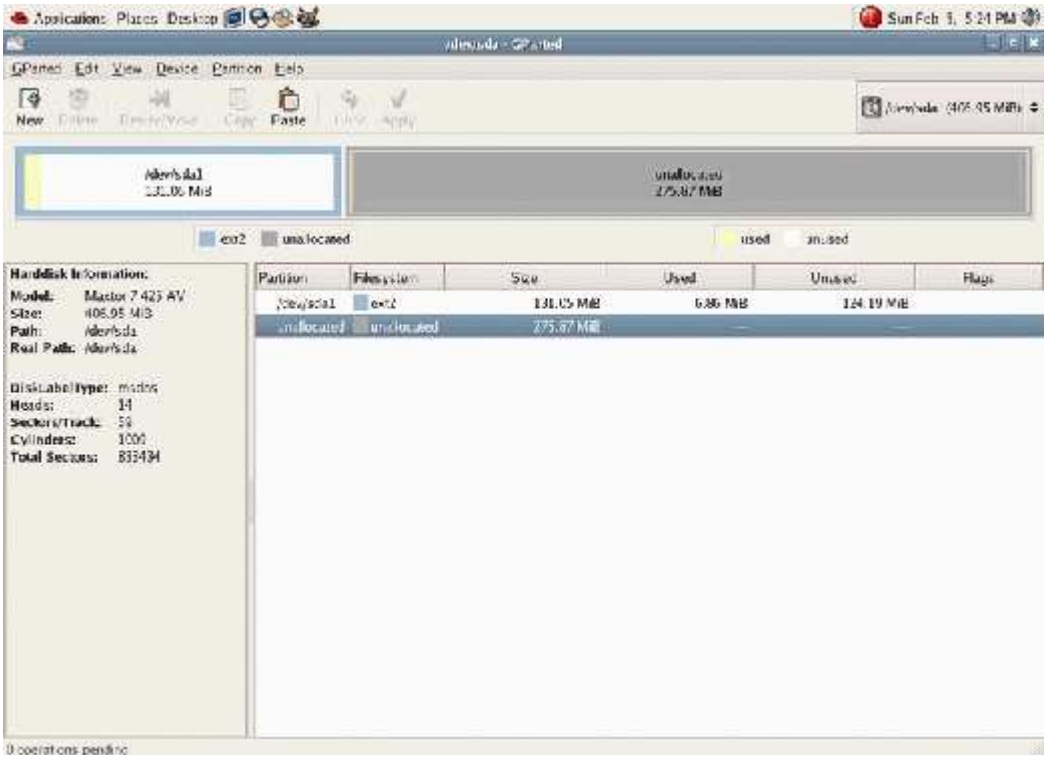


Figure 23

You may wish to resize the partition you want to past : same size or bigger ? (A smaller partition is impossible !)

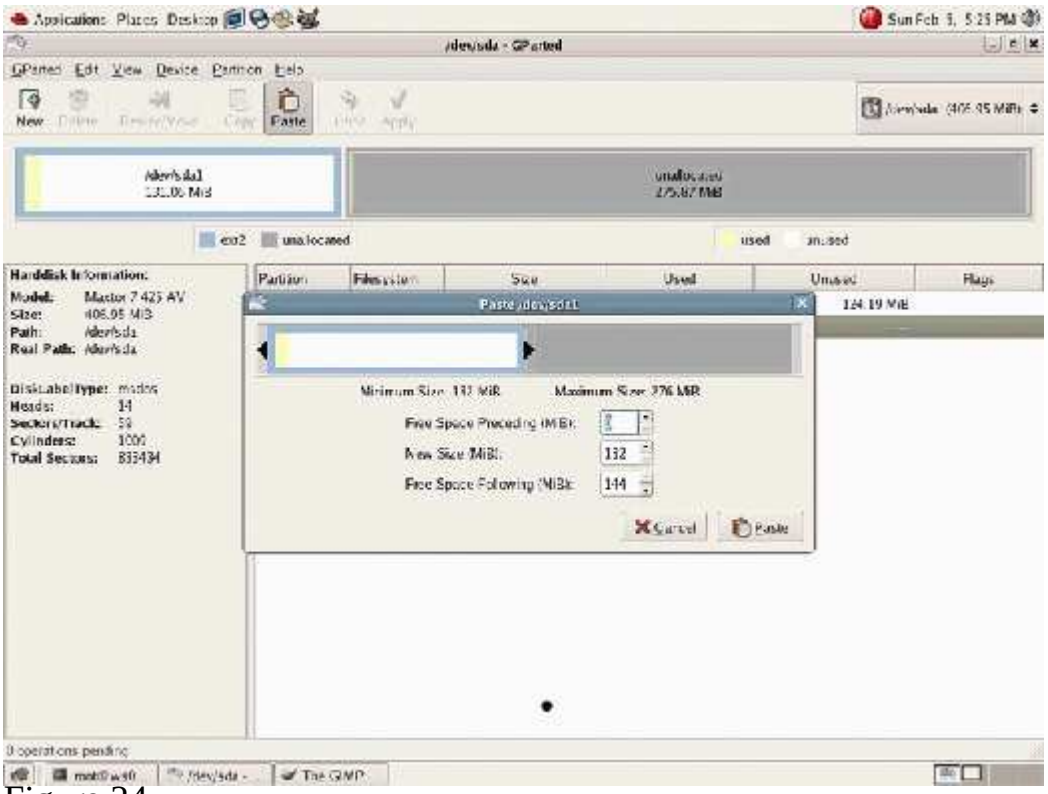


Figure 24

After you have pasted, you can click "***undo***" ...

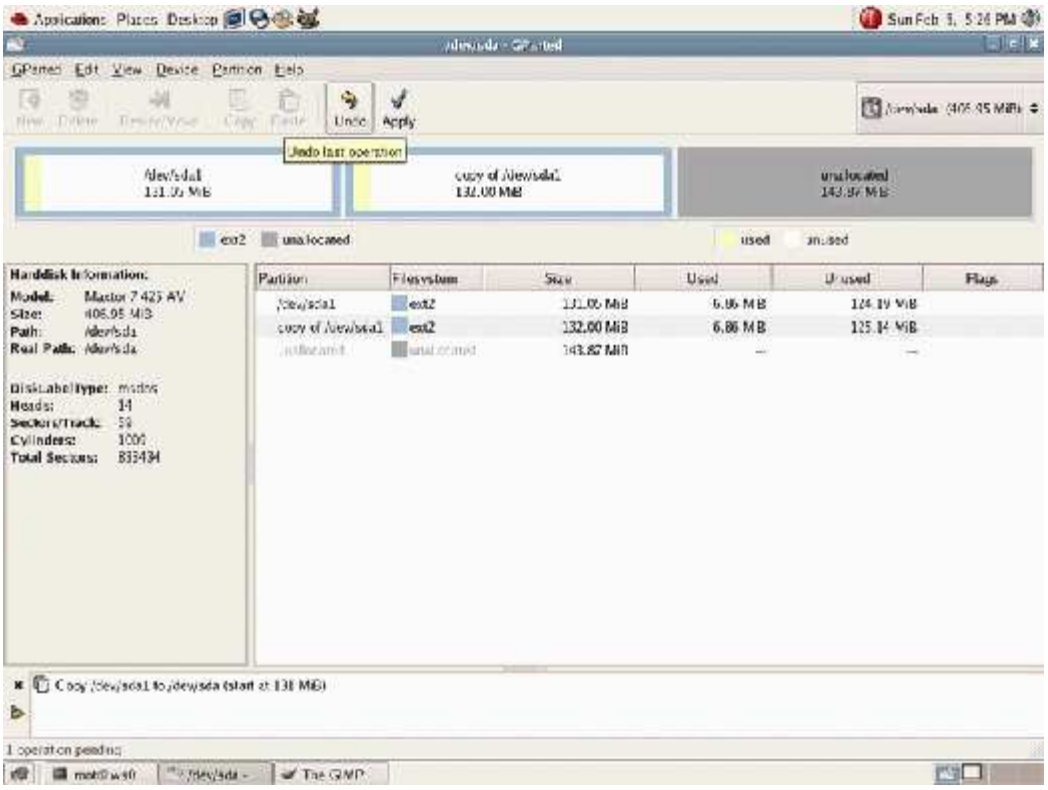


Figure 25

... or click "***apply***". Then you are asked for the last time...

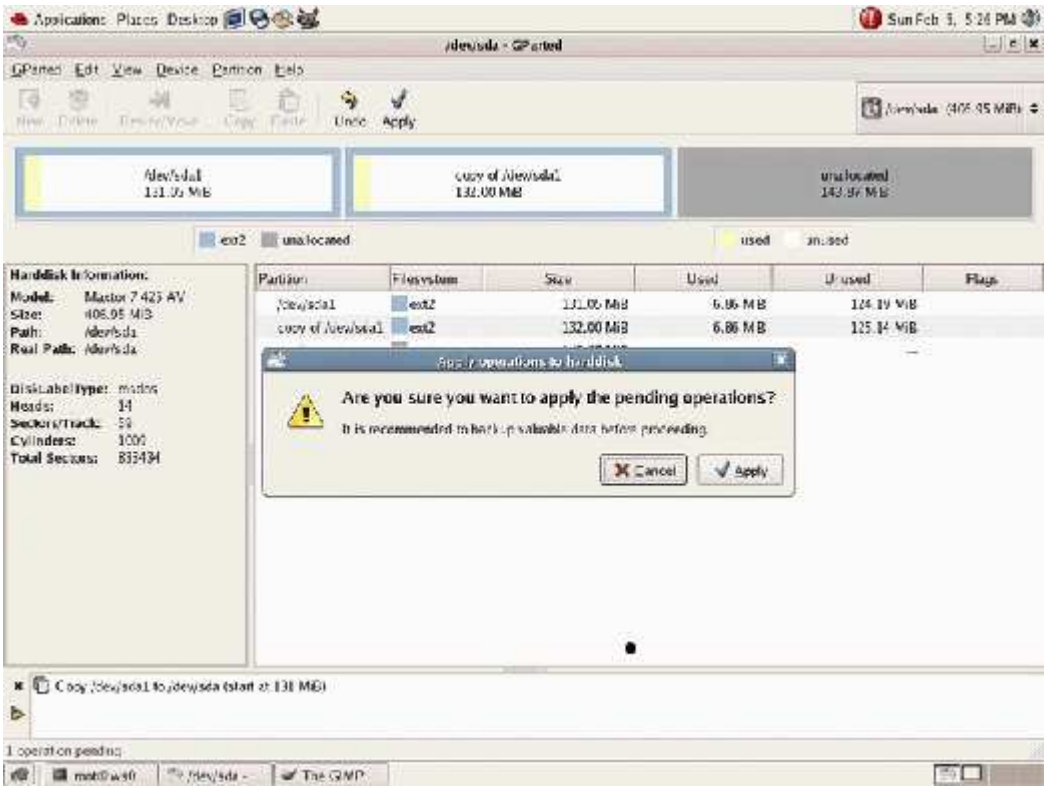


Figure 26

... pending operations may be seen by clicking on the arrows on blue circle.

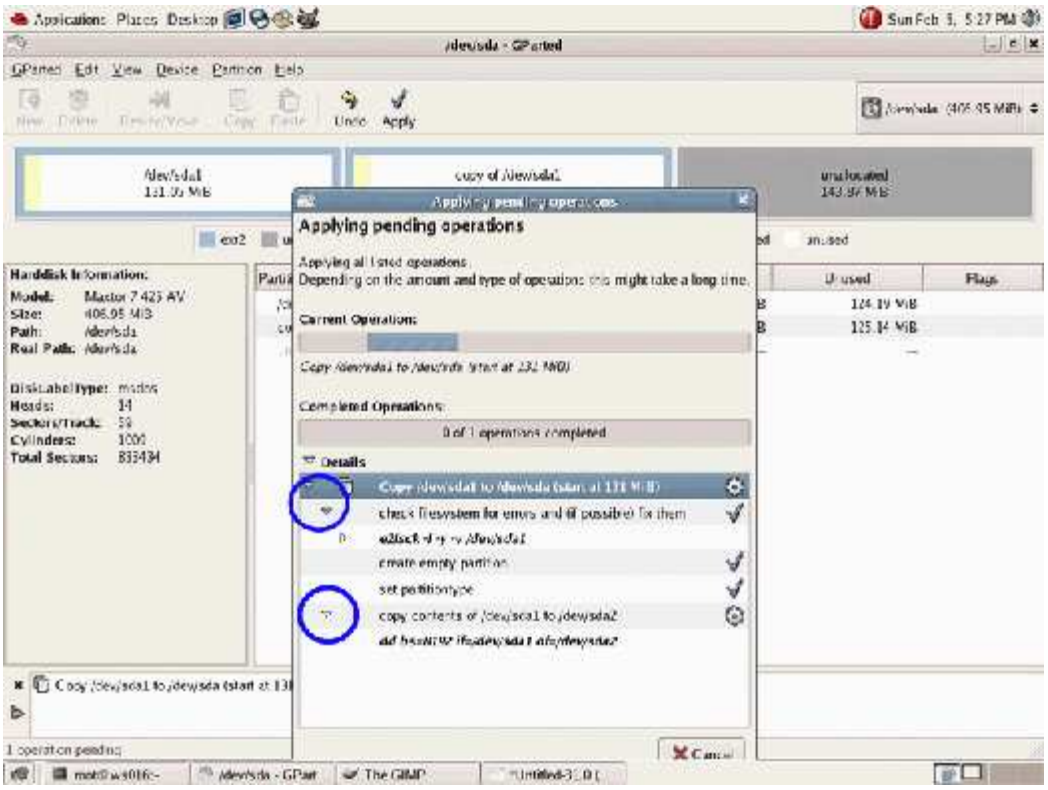


Figure 27

Of course you may cancel, but BE VERY CAREFUL :
It can be harmful depending of the file system !
.... and read all the messages !

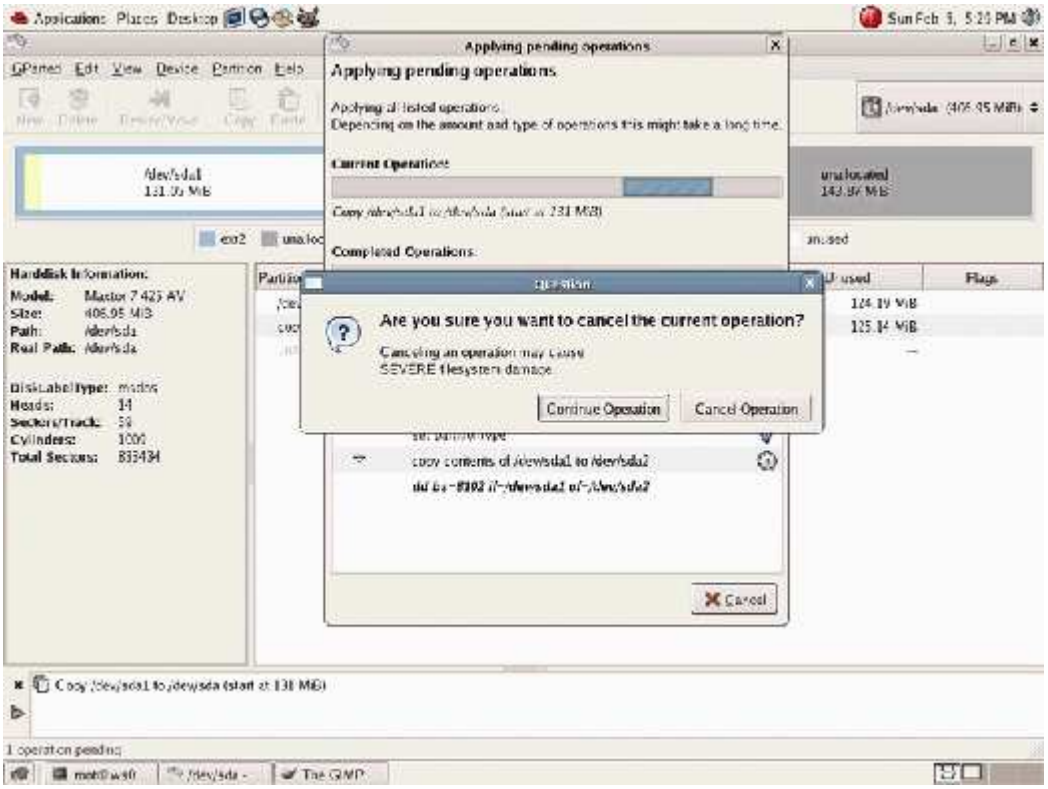


Figure 28

-4- Other tips ...

At the top right, if you click the arrow in the blue circle....

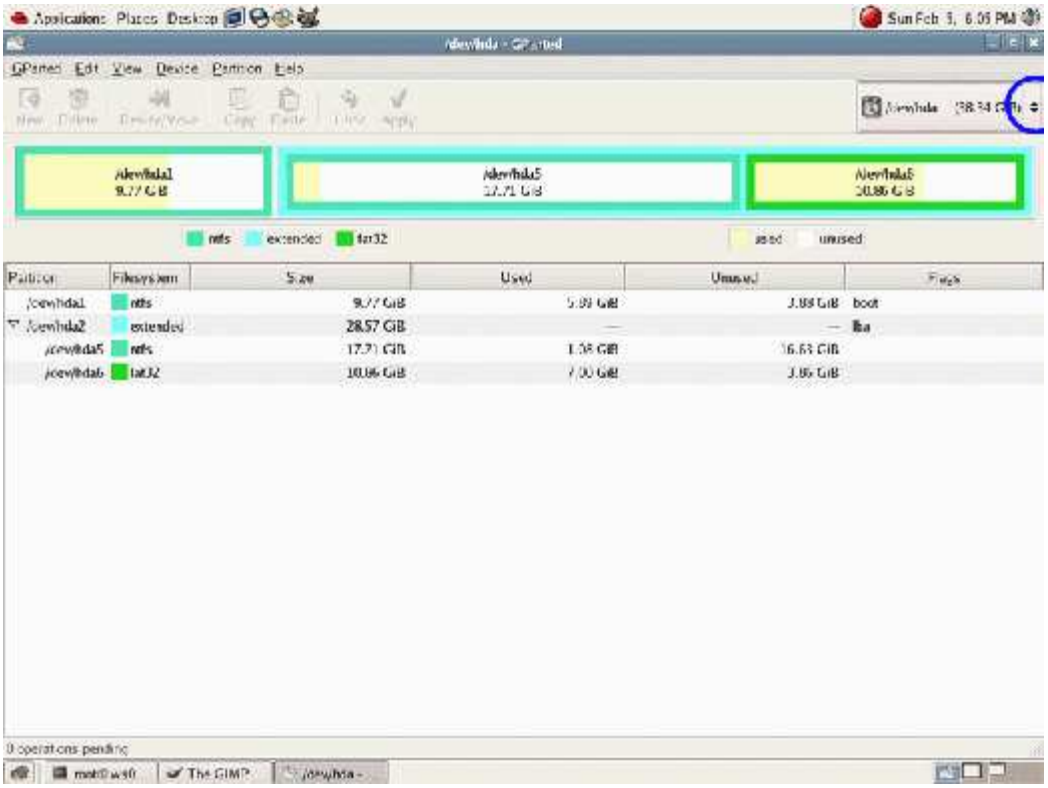


Figure 29

...you will see the number of drives (if more than one hard disk) on the system, and select the one you want to use ...

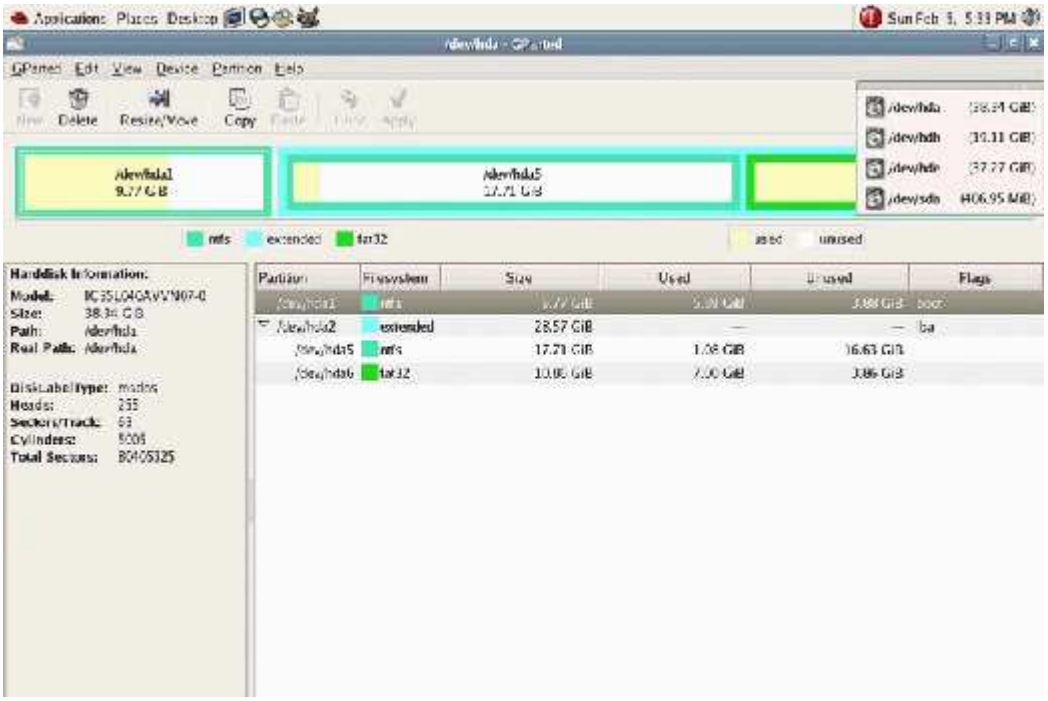


Figure 30

If you want to work on a mounted partition, you must first unmount it !
If a partition is mounted a brown lock is placed next to the partition.

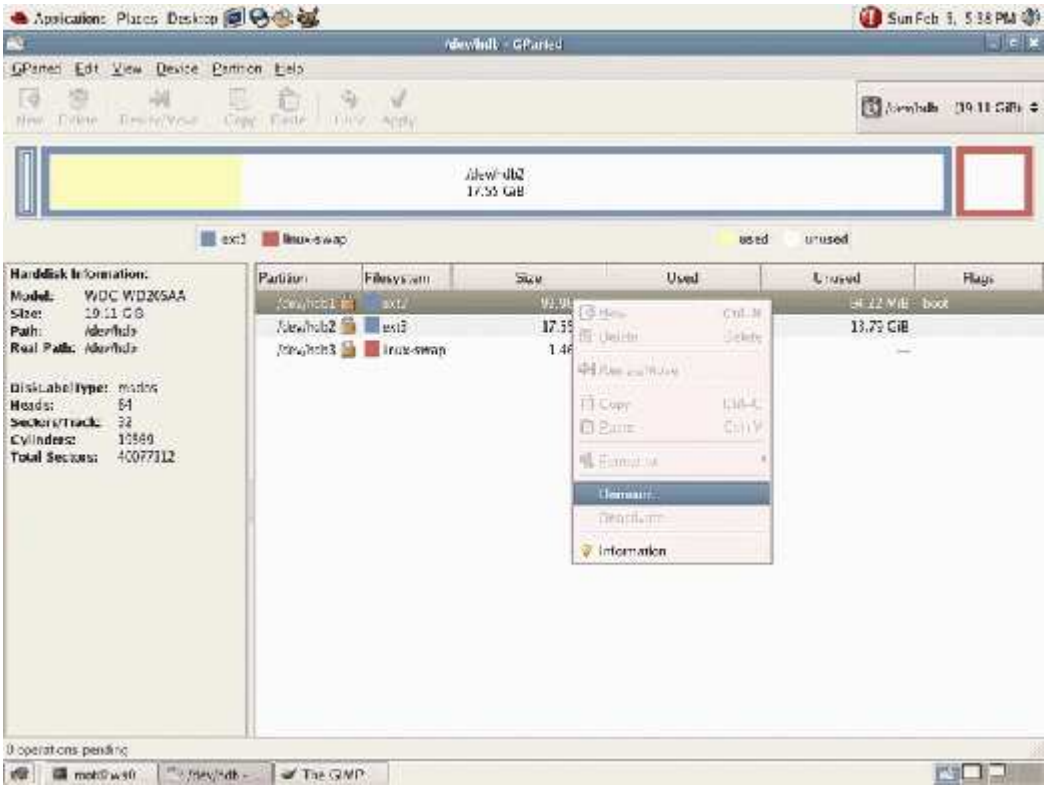


Figure 31

Other operations will now available.

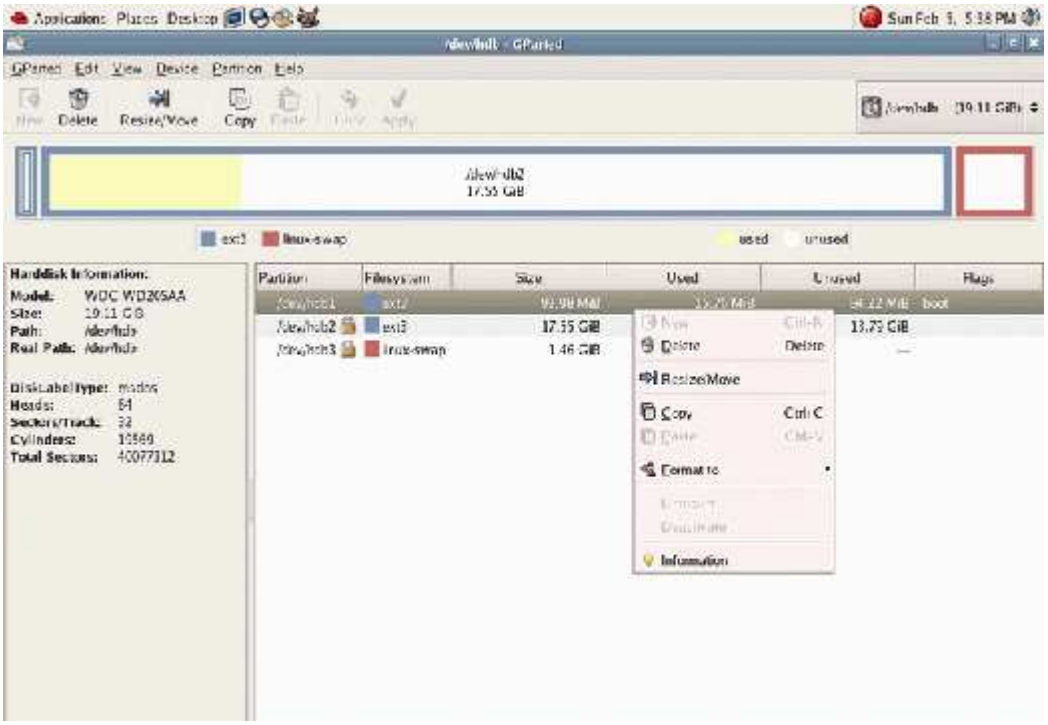


Figure 32

Deactivate the swap file is not necessary to enable the pending operations. But to modify the swap file, you must desactivate it by clicking on "*desactivate*".

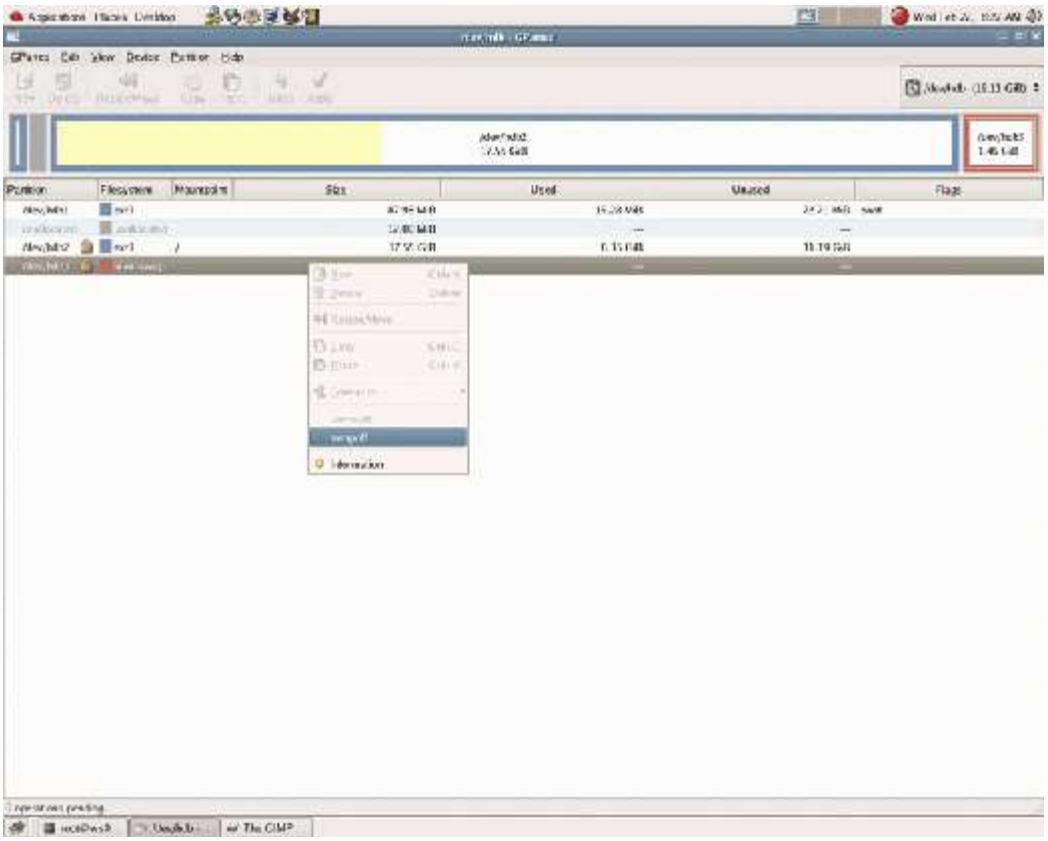


Figure 33

To close GParted, just close the window at the top right.

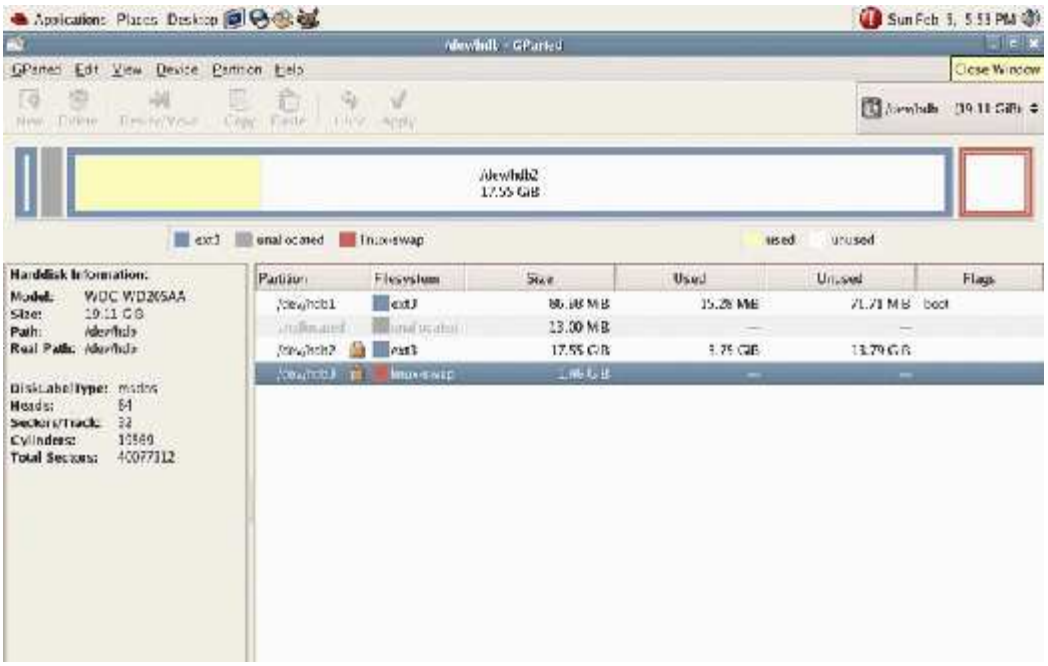


Figure 34

That all folks :-p

-5- HOW-TO RESIZE (step by step)