

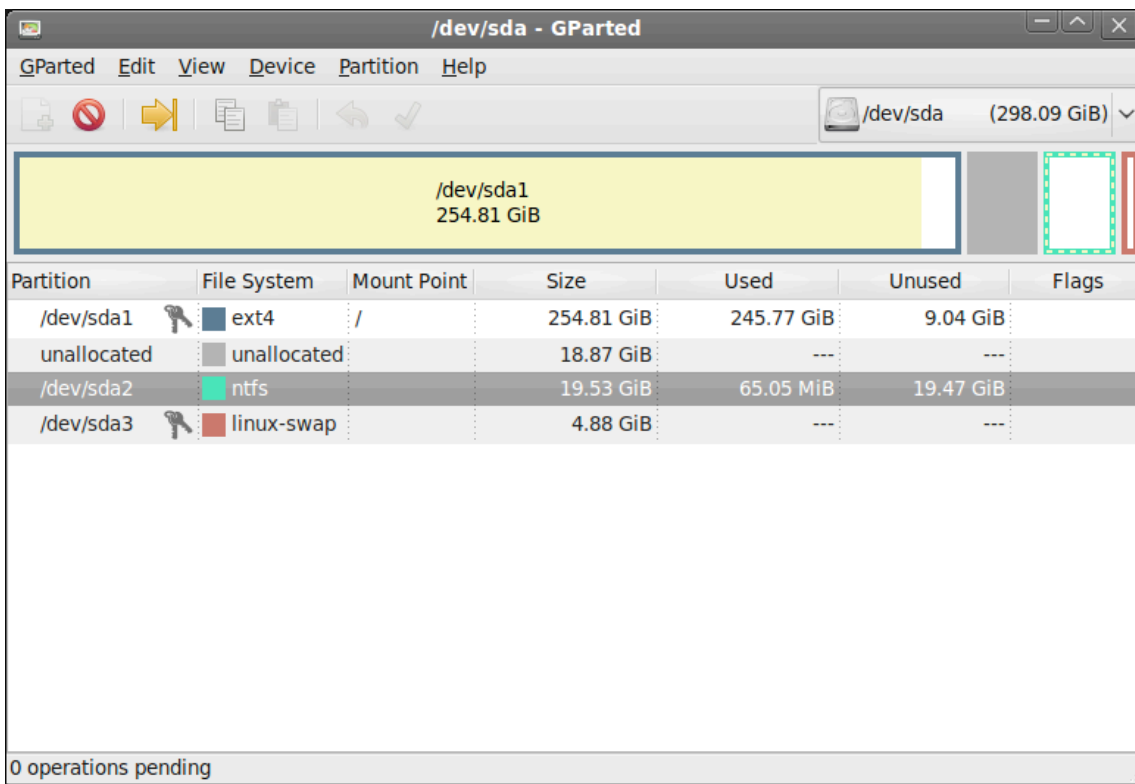
How to install Linux and Theli on your Computer

If you feel insecure at any time use google and youtube. You'll find Tutorials and Forums for almost everything today.

Step 1 Prepare your Harddisk

Commercial PCs are normally partitioned in the following manner: One partition is used for your System and a second (large one) for your data. To install a second Operating System on your Computer you need some free disk space so you should simply shrink this second partition. To do so i've used the Software Gparted. You can download it under the following link:

<http://gparted.org>



Download the Software, burn a CD, put it in your CD Rom and start your Computer again. Follow the instructions on the Gparted website if you're having any questions. You could also browse youtube for an online Tutorial about Gparted. Above there is a little Screenshot of the Software:

Step 1b (additional) Run a virtual Machine

If you don't like to install a second OS on your Computer or you just want to give Theli a try, you also could install a so called virtual machine. The easiest way to do so is with the help of the Software Virtual Box. You can download the Software here:

<https://www.virtualbox.org/>

Please read the manual or ask youtube for some tutorials. Its really not difficult to run the software and install a virtual machine. But i have to say it's a bit tricky to install a data transfer folder to exchange data between the Host OS and the Virtual Machine.

If you want you could install a VM called Ubuntheli which is already compiled and packed with all the usefull stuff you need during your image reduction process. Ubuntheli is available from Carsten Moos.

Step 2 Installing Linux

The following steps are the same either you've installed a second OS or you running it in a VM.

If you don't know which of the endless Linux Distributions to choose, i recommend Ubuntu.

During the installation you get asked how to partition the disk. Simply choose: Use the largest continious free space.

Make exessevly use of google, youtube or whatever to get answers to your questions about the installation. It's not that complicated to install Ubuntu, just follow the instructions during the installation step by step.

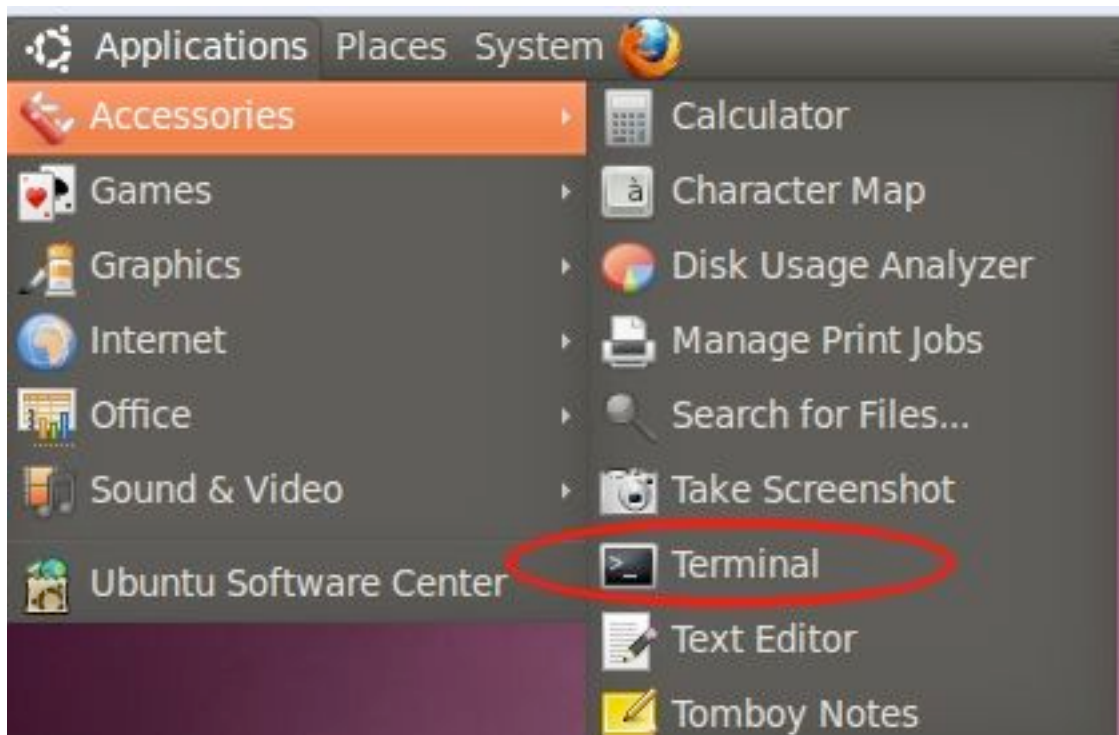
Step 3 installing Theli

Open the Folder /home/yourname/ and create a new Folder called Theli.
Open Firefox and visit:

<http://www.astro.uni-bonn.de/~theli/gui/index.html>

Go to Step 1. Download and download the core and gui packages by clicking on the links. Also download the scamp version according to your OS (32bit athlon or i686 or 64bit)

Move the downloaded rar Files to the Theli Folder you've created.
Open a terminal Window



Now just Copy and paste one by another the lines you'll find in the Theli Documentary under Installation/Other requirements. So Start with

```
sudo apt-get update
```

Copy it, paste it into the Terminal Window and hit Return. Answer all Yes and No Questions with Y and do so for the rest of the list one by another.

Change the Directory in your Terminal by typing: `cd Theli`
If done follow the instructions in the manual. Simply copy and paste the Lines under 2.3.1. in your command Line and hit return. Don't forget to adapt the Version number!

```
tar xvfz theli-<version>.tgz
```

Followed by the other lines.

Do the same with the GUI as described under 2.3.2

After the installation you'll get the message that you have to install scamp and include it to your PATH environment variable.

So copy your Scamp executable to `/home/yourname/Theli/theli-versionnumber/bin/Linux(_64)/`

Again open a Terminal and do the following:

```
cd  
emacs .bashrc  
scroll down to the end and type in:
```

```
export PATH=/home/yourname/Theli/theli/bin/Linux/:${PATH}  
alias theli='/home/yourname/Theli/theli/gui/theli'
```

Congrats your done! Close the Terminal, open it again and type in Theli. There you are!

Load the DS9 Image Browser (you're free to use skycat as well) here:

<http://hea-www.harvard.edu/RD/ds9/site/Download.html>

Have Fun with Theli. Visit my Youtube Channel and follow my Theli Standart Workflow Tutorials.

<http://www.youtube.com/astrophotocologne>

Have Fun

Frank Sackenheim Feb 2013