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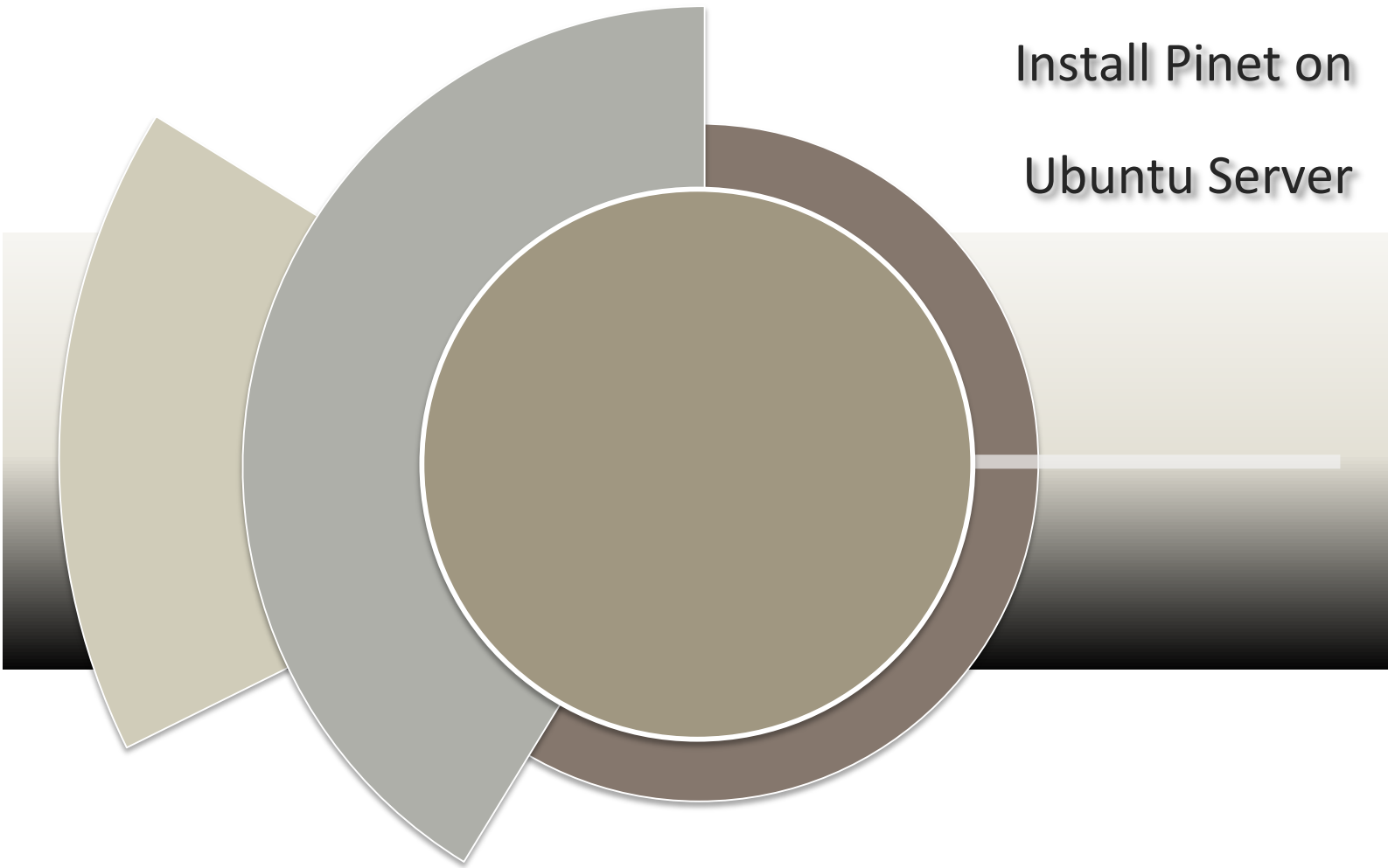


Install Pinet on Ubuntu Server

DAVID SANZ CAREGUI

Install Pinet on Ubuntu Server

Index

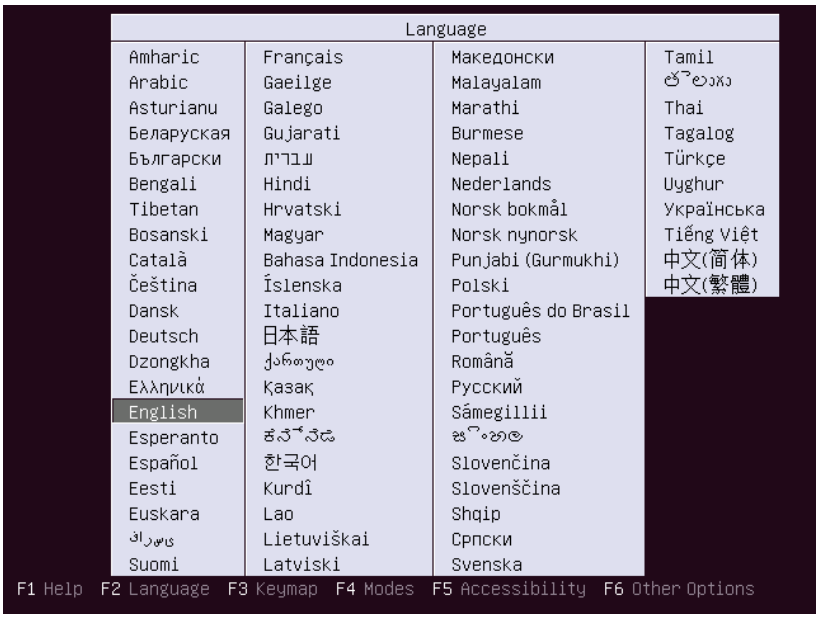
Install Ubuntu Server

Firstly download Ubuntu server iso image

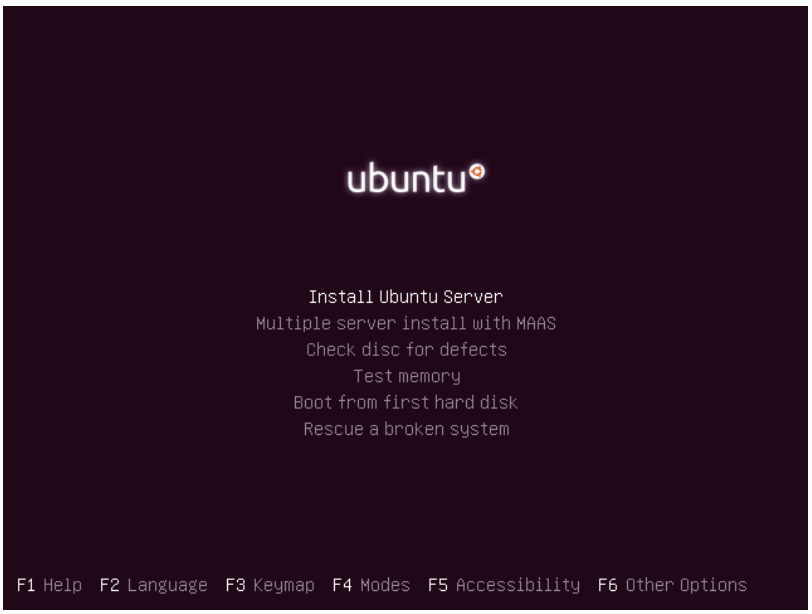
http://www.ubuntu.com/download/alternative-downloads

Im going to use 32bits iso because the computer I use is an old Pentium IV

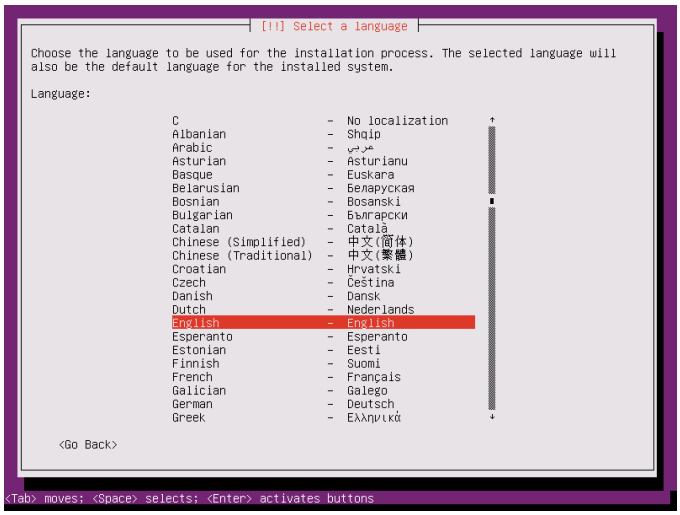
Create a bootable CD/USB image. After system booting sequence choose your media bootable type from BIOS options (CD/DVD or USB drive). On the first prompt choose your **Language** end hit Enter



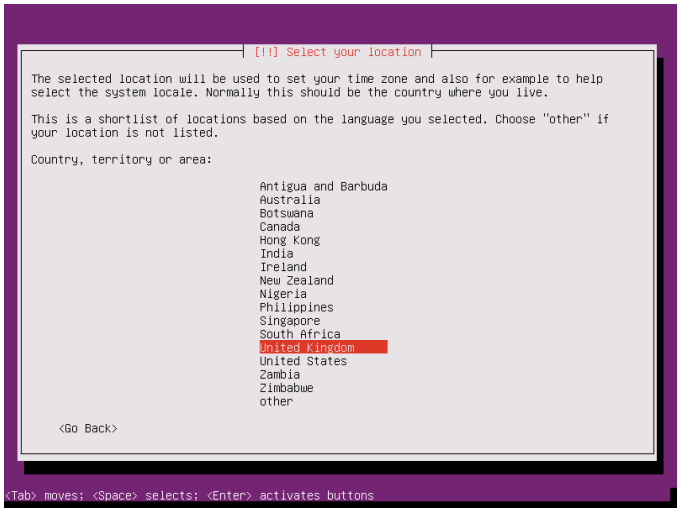
On next screen choose **Install Ubuntu Server** and hit Enter



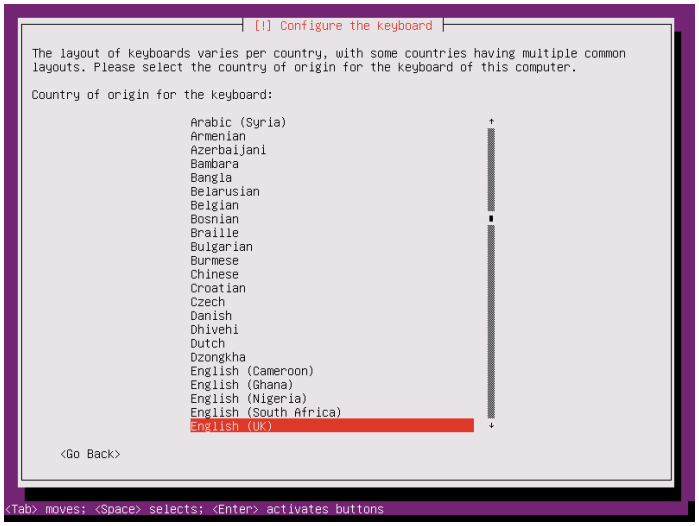
Next select your **System default Language** and also Installation process **Language**

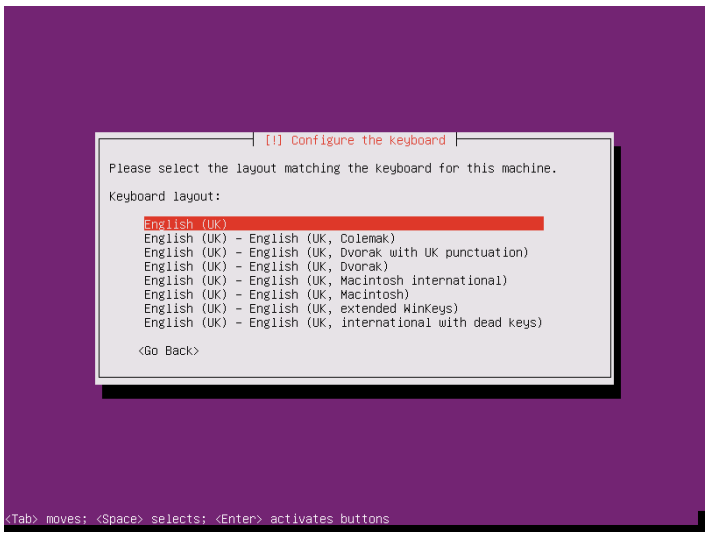


Select your **Country**

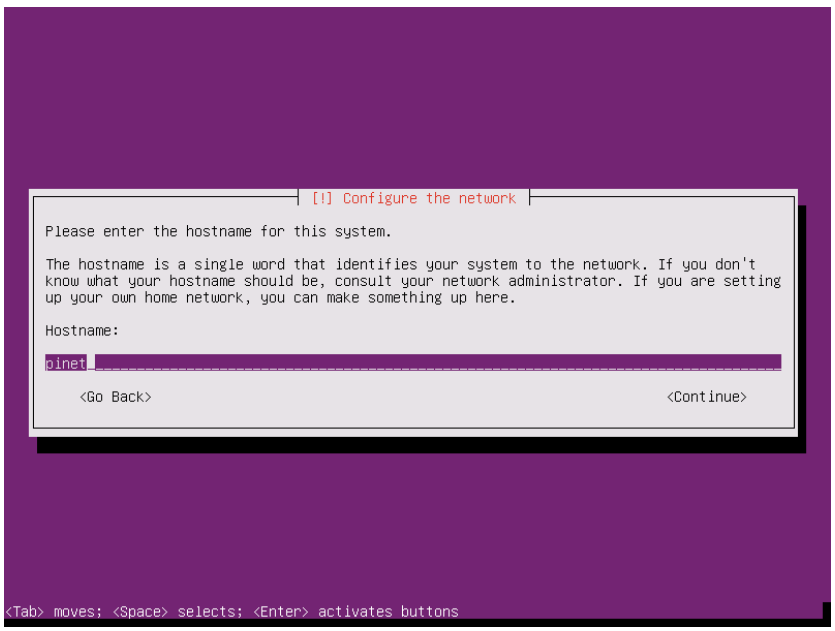


On next prompt configure your **Keyboard**, choose **No** and setup English as default language

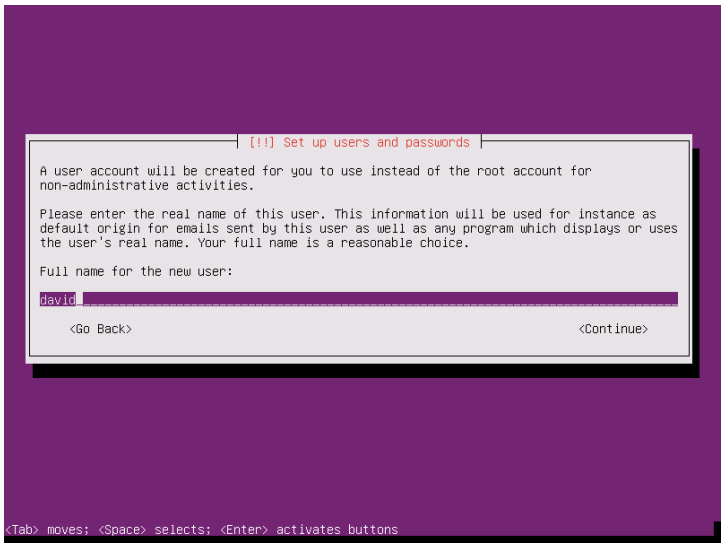


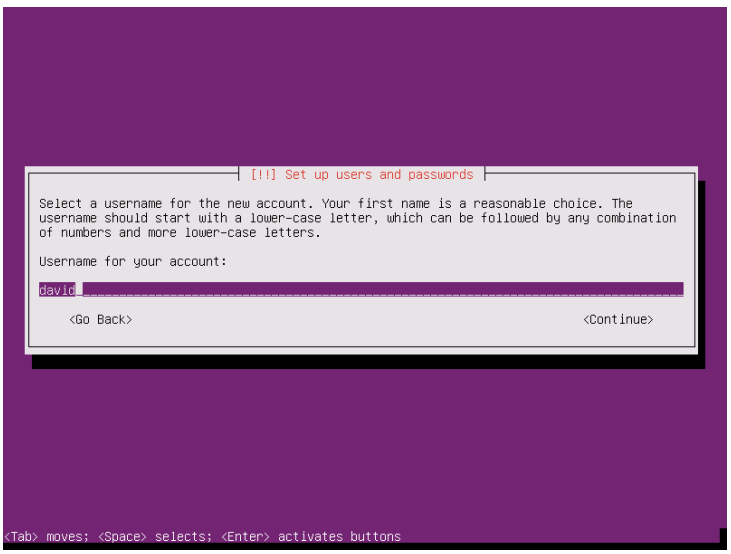


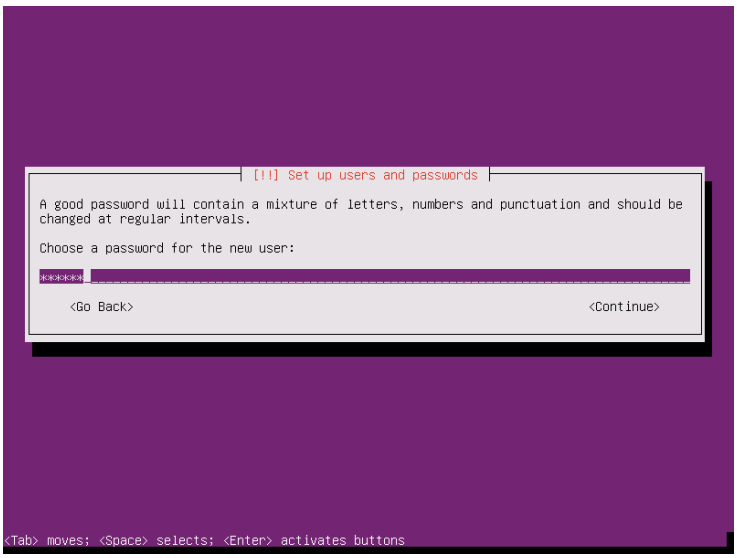
Setup your system **hostname**

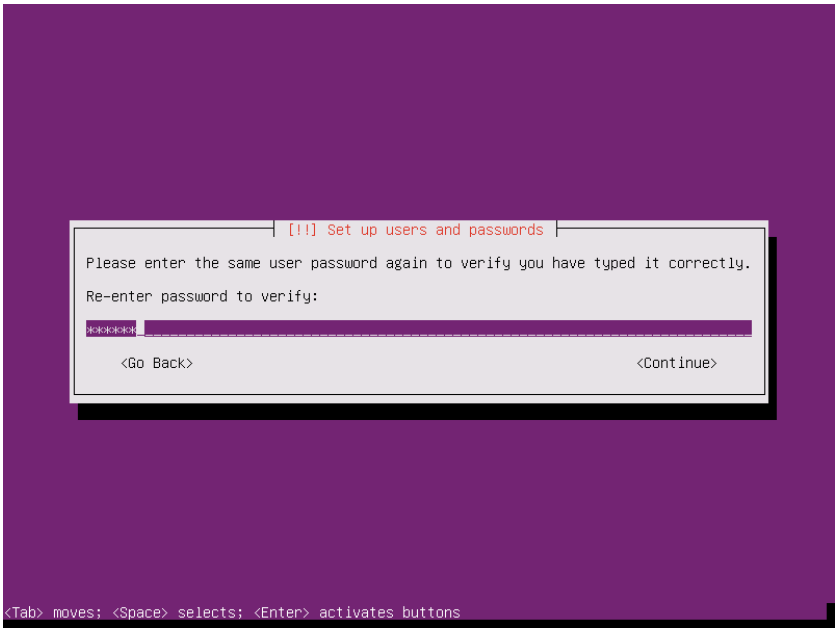


Now is time to setup your administrative user, enter your **full name**, **username** and **password** and hit **continue**

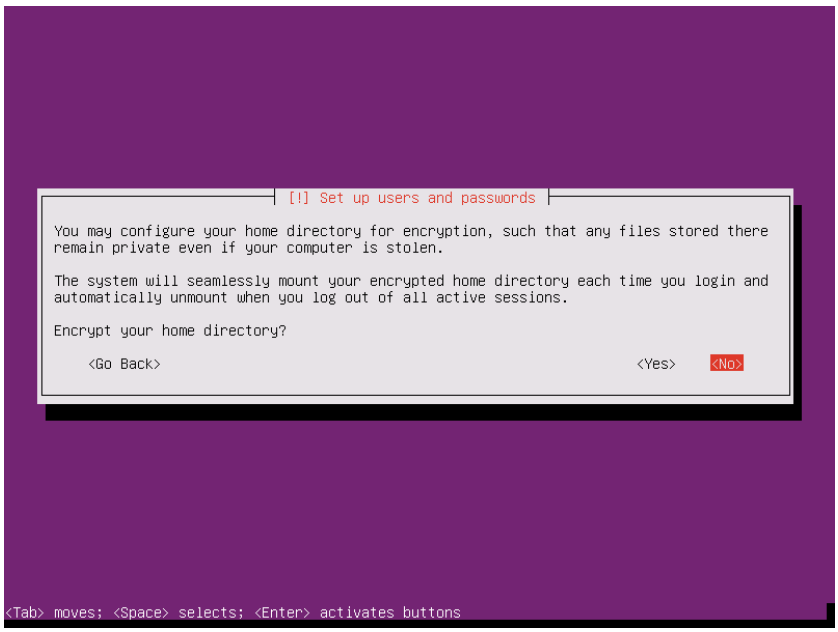






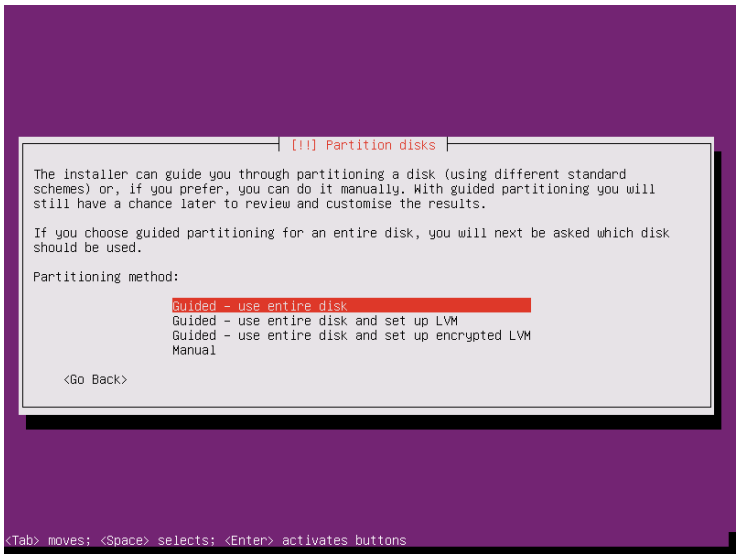


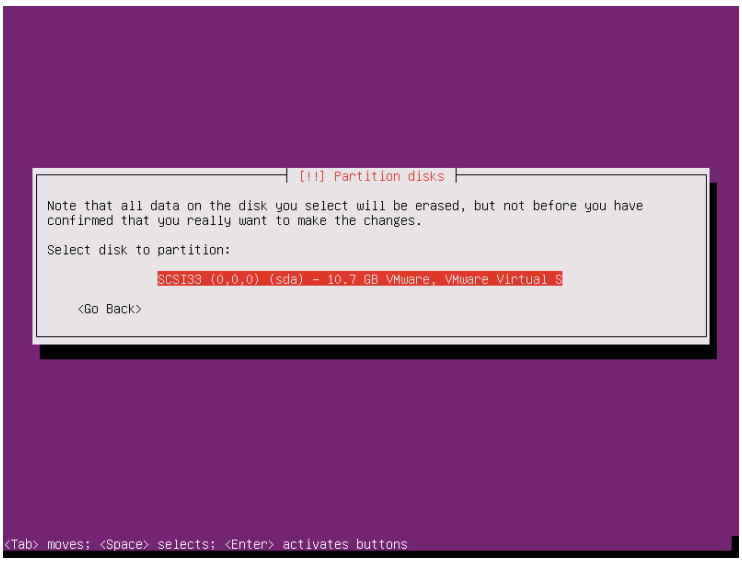
The next screen offers the option to secure all data by **Encrypting** home directory. If this is not the case choose **No** and hit **Enter**

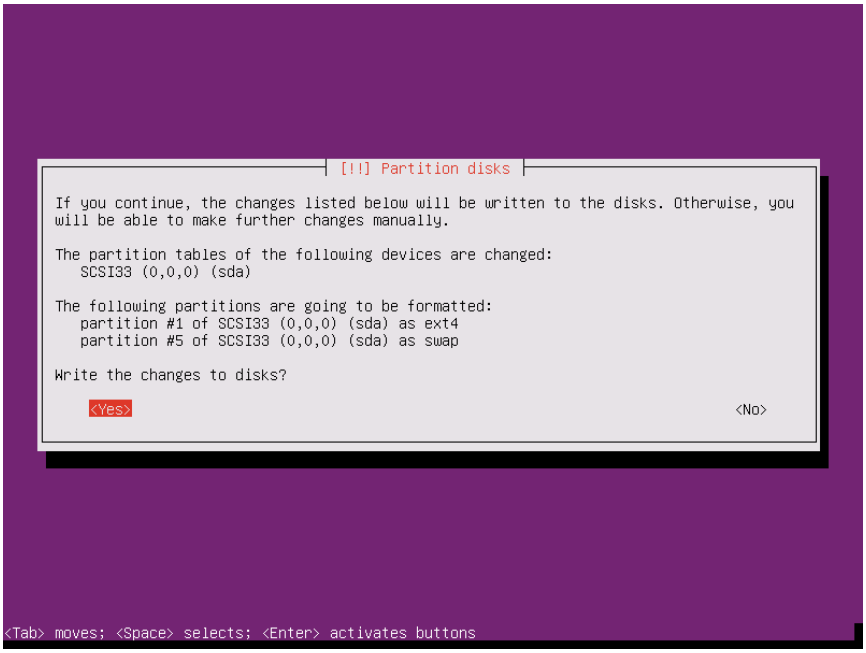


If while installer runs and your network interface card has Internet connectivity the installer will automatically detect your **Location** and setup your correct **time zone**. If the provided time is not correctly setup you have the option to choose it manually from a list else choose **Yes** and press **Enter**

On next screen **Partition Disks** choose **Guided –use entire disk**, select your disk to partition and accept partition table

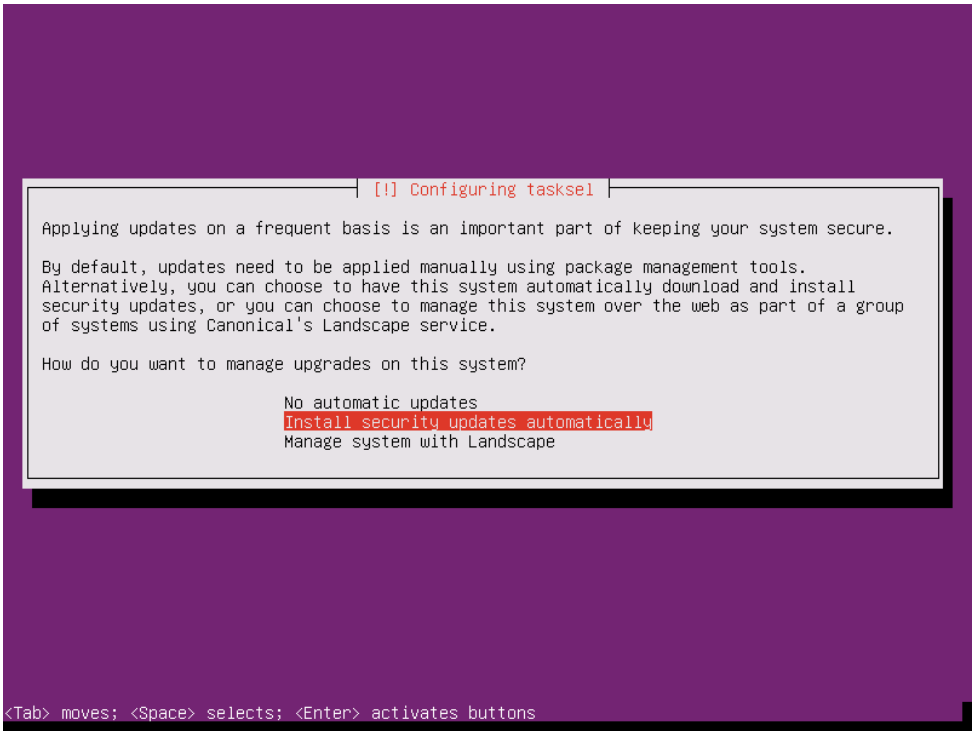




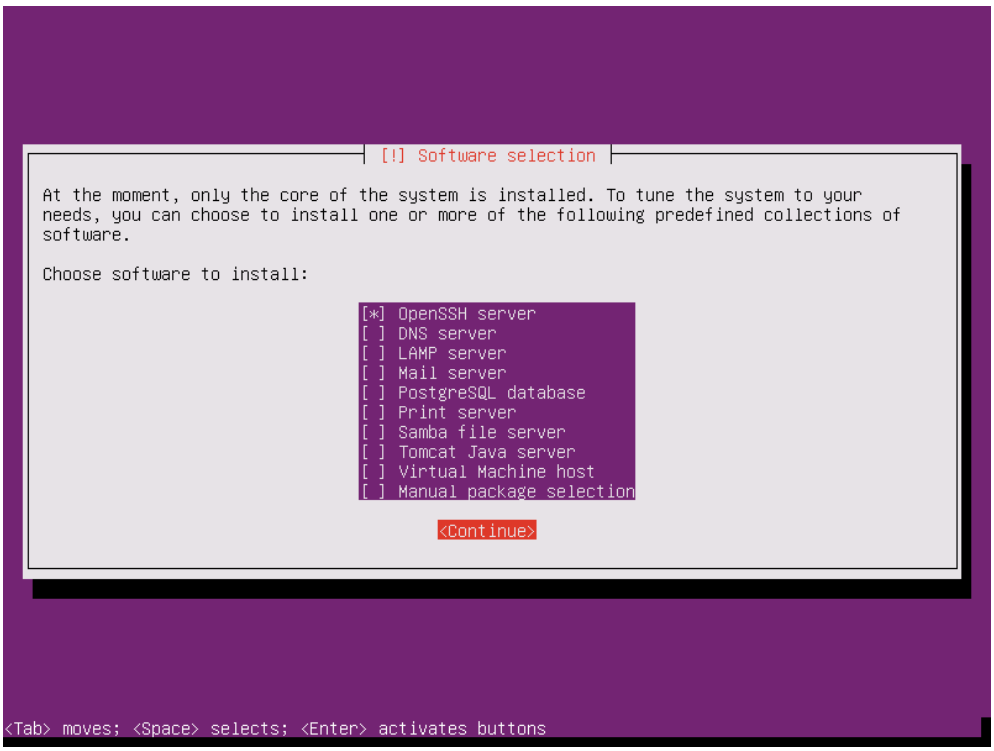


After all hard-disk partitions had been written to disk the installer starts copying data software to disk and then reaches **HTTP** proxy option. If you don't access Internet through a proxy leave it **blank** and **Continue**

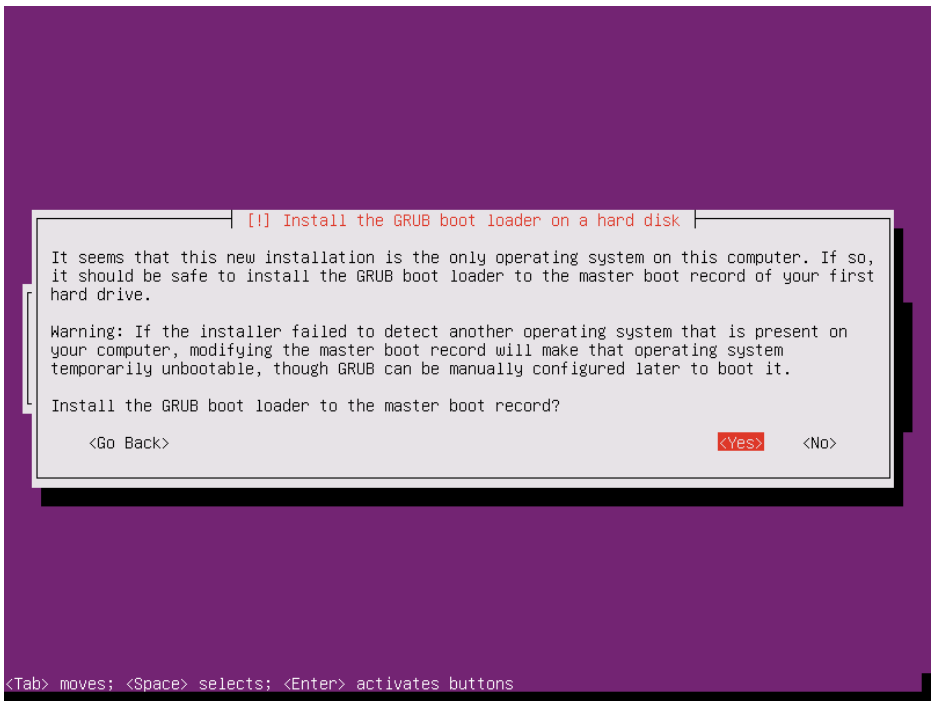
Next the installer scans the CD image for software packages and reaches **Updates** options. Choose the option you like and press Enter



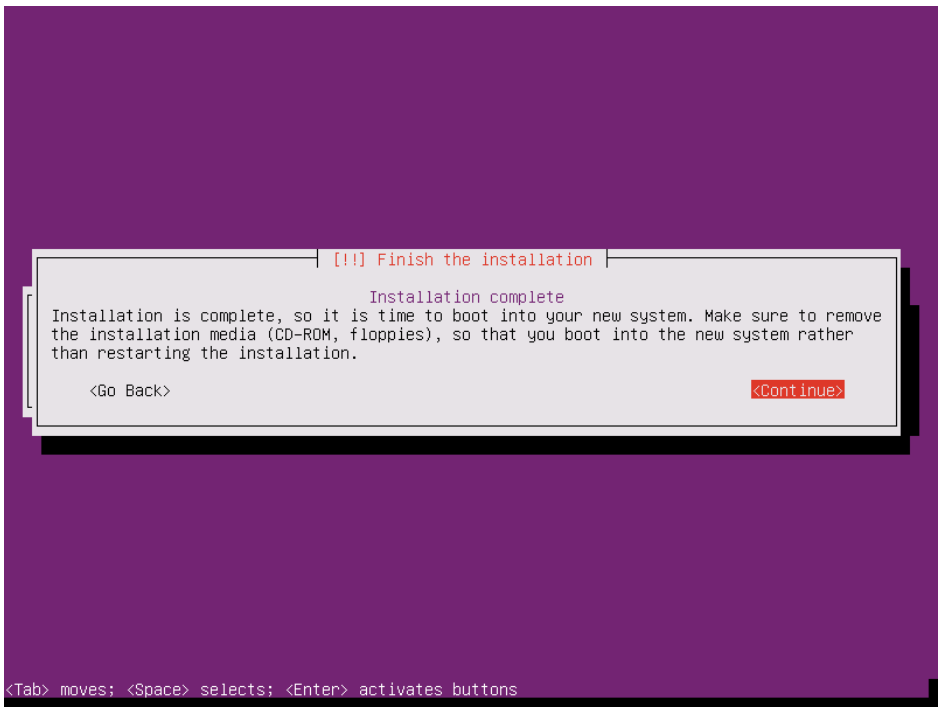
Now the base system is installed but the installer invokes **tasksel** package which helps you to install some server packs before finishing. For a better control over your server choose only **OpenSSH server** by pressing Space bar key while others will be installed and configured later and choose **Continue**



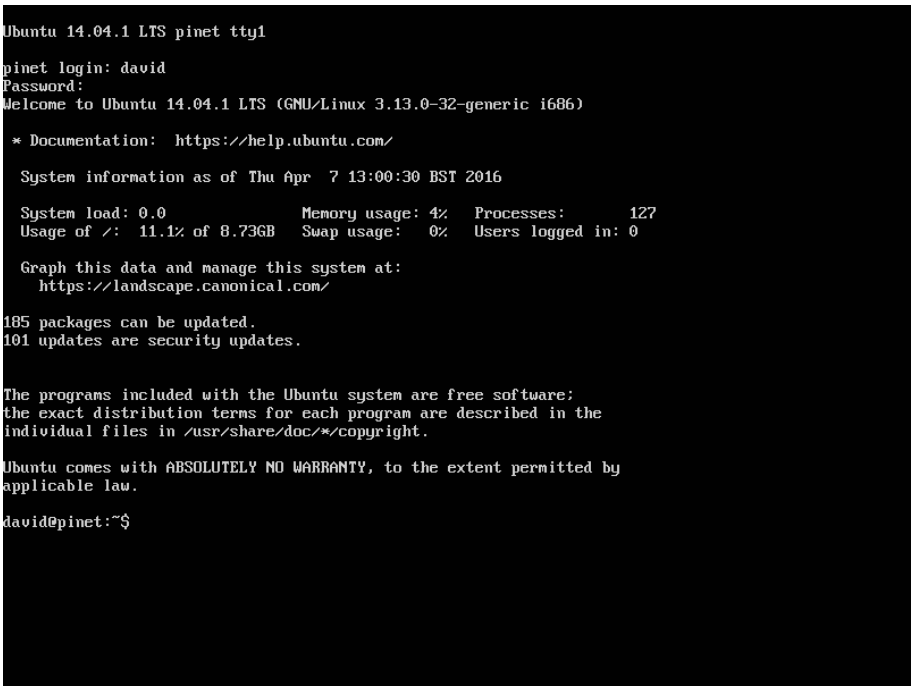
The selected packages are being installed while the last option is displayed on your monitor demanding to **Install GRUB to MRB**. Because the system can't boot on his self without **GRUB**, choose **Yes**



Once the **GRUB** boot loader is installed the installation process reaches it's end. Remove your media installation drive (CD/DVD,UDB) and hit **Continue** to **reboot**

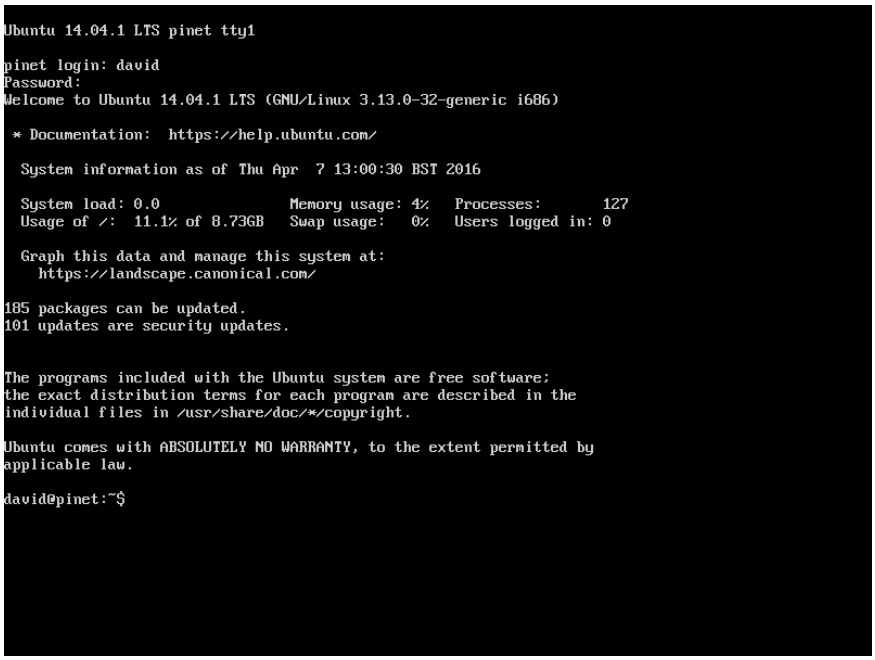


Once the computer **reboot** we can use our **Ubuntu Server** just login into it



Install Pinet on Ubuntu Sever

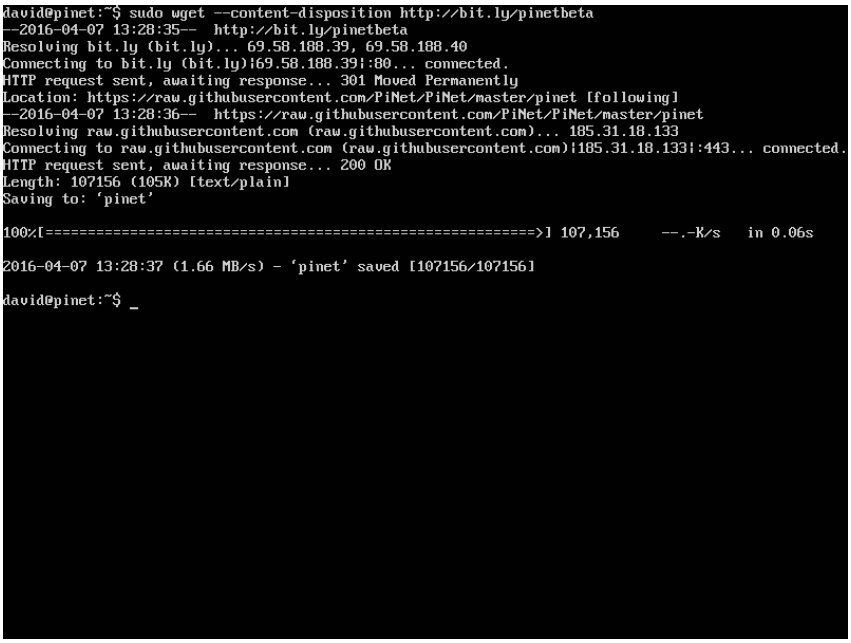
Once the machine reboots, login with your **credentials** you set up earlier



Enter this command and hit enter

```
wget --content-disposition http://bit.ly/pinetbeta
```

This downloads the **PiNet script**. The main script is called **pinet**

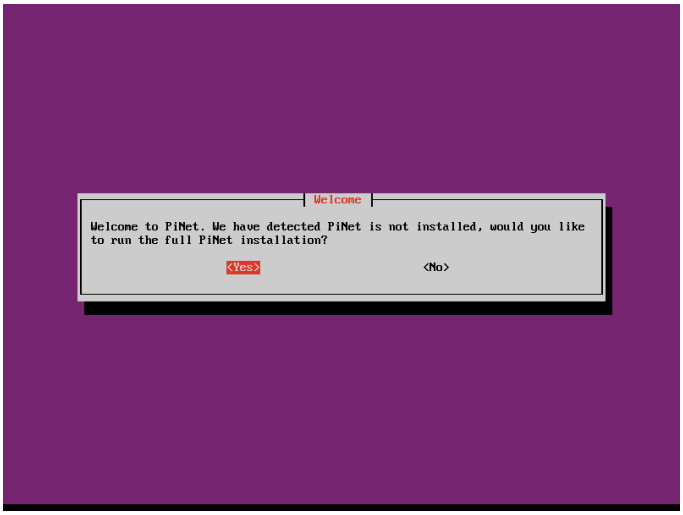


Once that completes, enter

```
sudo bash pinet
```

Which will launch **PiNet**

PiNet will offer to run a full install, select **Yes**

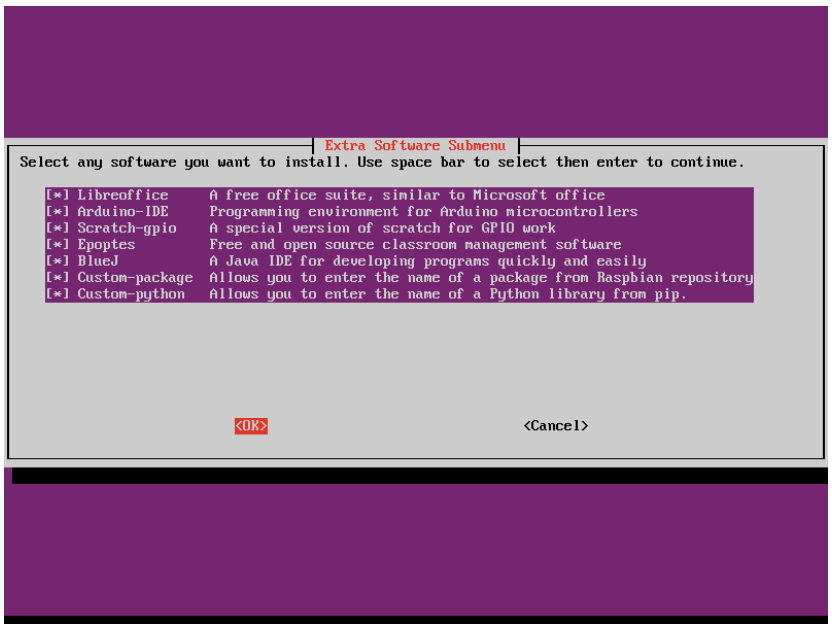


PiNet supports importing user data from an older PiNet server, select **No**

Select which **release channel** you wish to use. If using in a production environment, it is recommended you select **stable**

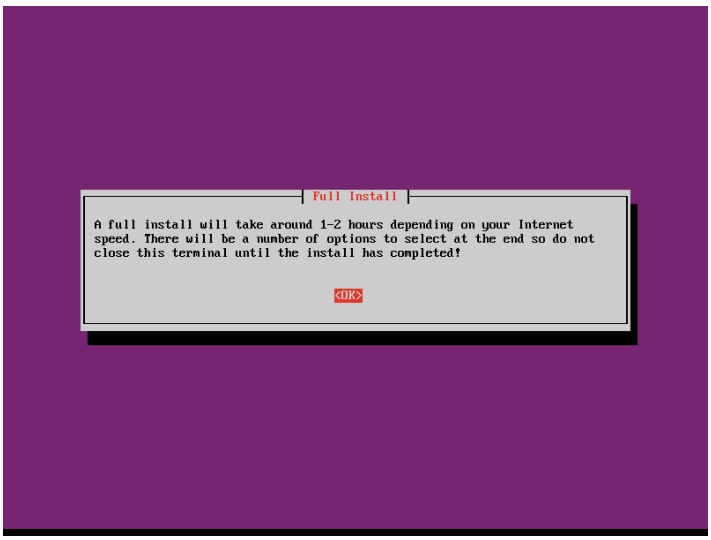
The extra software dialog will be displayed, here you can select any additional software you with to install. Select **OK**

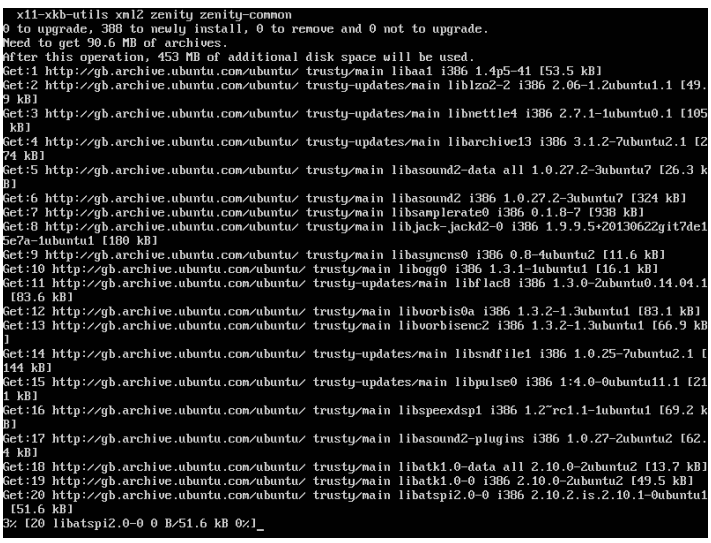
Select the software you wish to install and select **OK** again



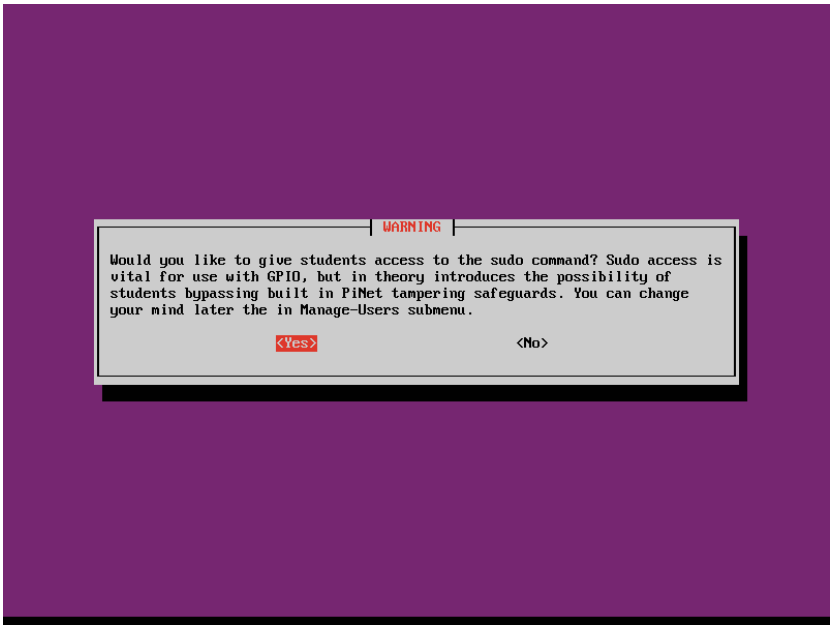
Select **Yes** to confirm the software installation

The install will take roughly 1-2 hours depending on processor speed and internet speed. Select **OK** and it will **start the installation**



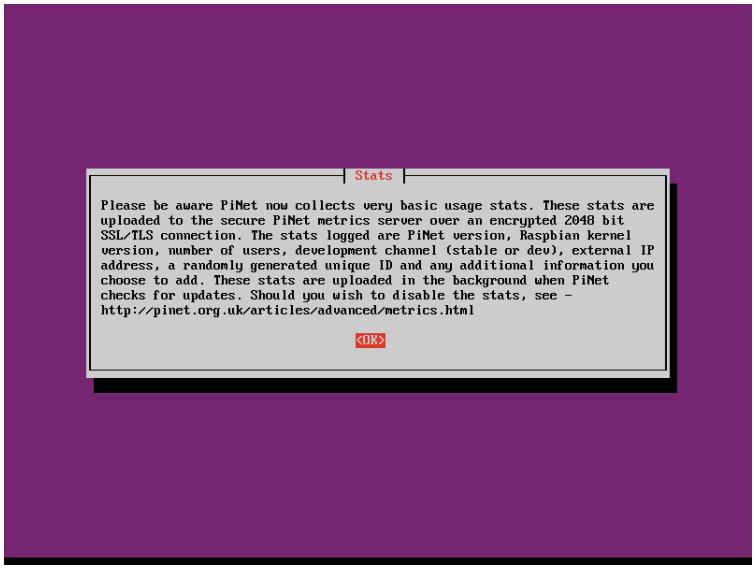


You must decide if you need students to have **Sudo access** on the Raspberry Pi. If you intend to work with the **GPIO** pins on the Raspberry Pi they will need it. You can really easily later enable or disable Sudo use in the **Manage-Users** submenu in the main software options. If in doubt, is recommended to enable it by selecting **Yes**

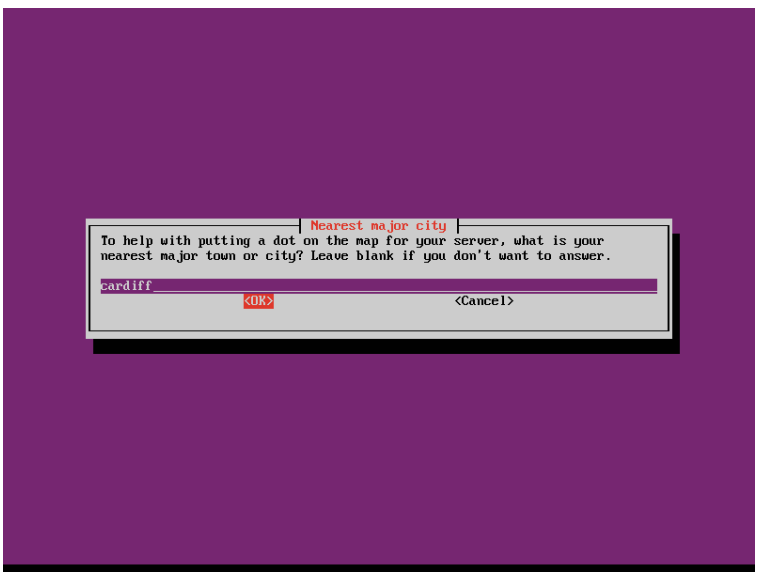


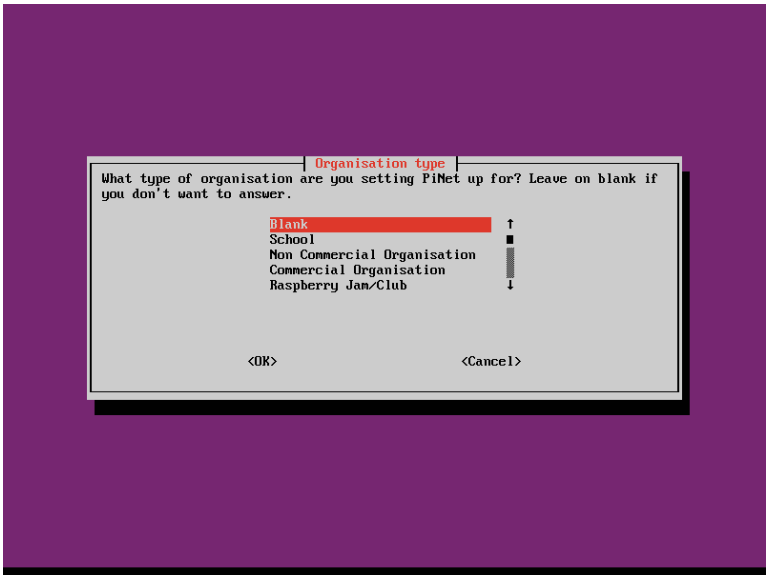
Ip address dialog box as you if you want to setup the SD card image with it, select **Yes**

Next windows ask you for information about your organization you can give details or leave it in blank, it's up to you select **OK**

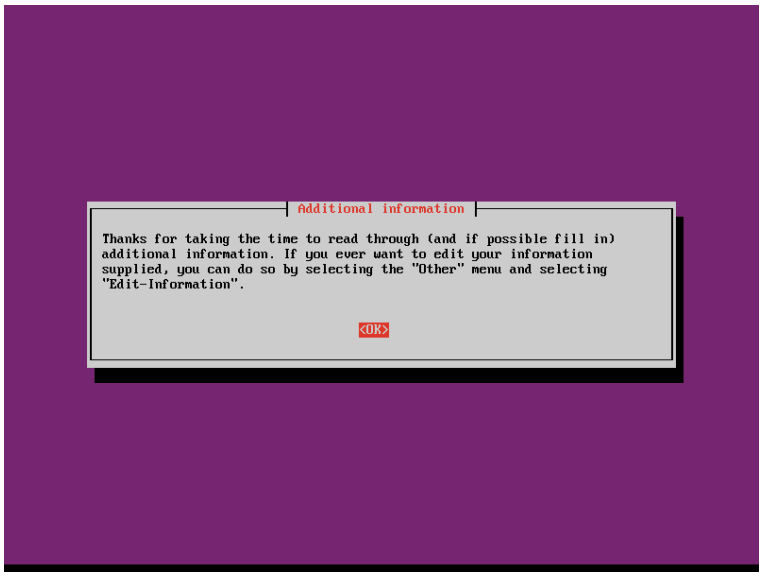

Stats
Please be aware PiNet now collects very basic usage stats. These stats are uploaded to the secure PiNet metrics server over an encrypted 2048 bit SSL/TLS connection. The stats logged are PiNet version, Raspbian kernel version, number of users, development channel (stable or dev), external IP address, a randomly generated unique ID and any additional information you choose to add. These stats are uploaded in the background when PiNet checks for updates. Should you wish to disable the stats, see - http://pinet.org.uk/articles/advanced/metrics.html
<OK>


Additional information
It is really awesome to see and hear from users across the world using PiNet. So we can start plotting schools/organisations using PiNet on a map, feel free to add any extra information to your PiNet server. It hugely helps us out also for internationalisation/localisation of PiNet. If you do not want to attach any extra information, please simply leave the following prompts blank.
<OK>

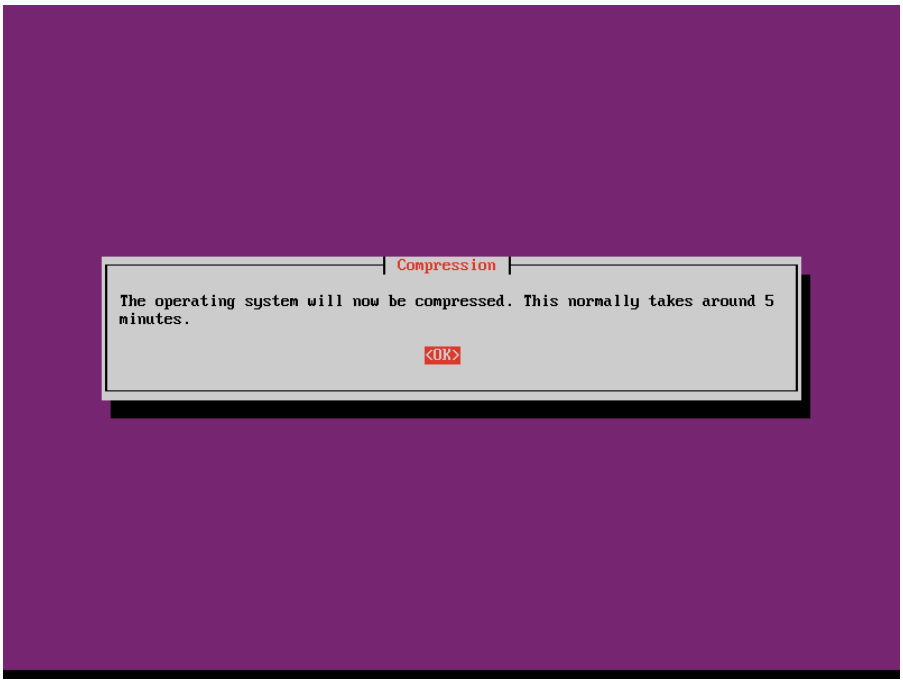

Nearest major city
To help with putting a dot on the map for your server, what is your nearest major town or city? Leave blank if you don't want to answer.
cardiff
<OK>
<Cancel>

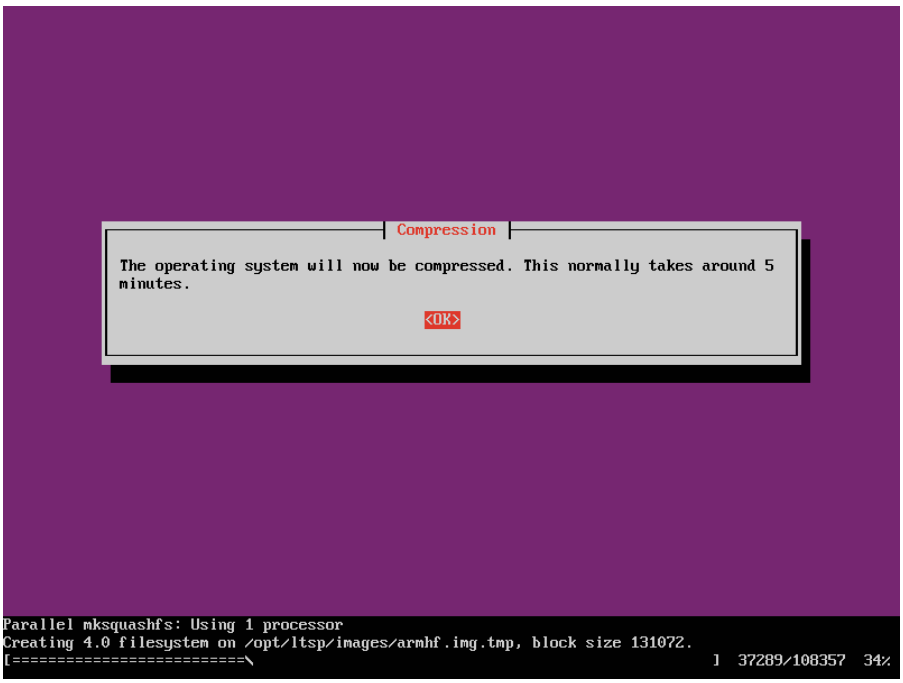

Organisation type
What type of organisation are you setting PiNet up for? Leave on blank if you don't want to answer.
Blank
School
Non Commercial Organisation
Commercial Organisation
Raspberry Jam/Club
<OK>
<Cancel>


School/organisation name
What is the name of your organisation? Leave blank if you don't want to answer.
<OK>
<Cancel>

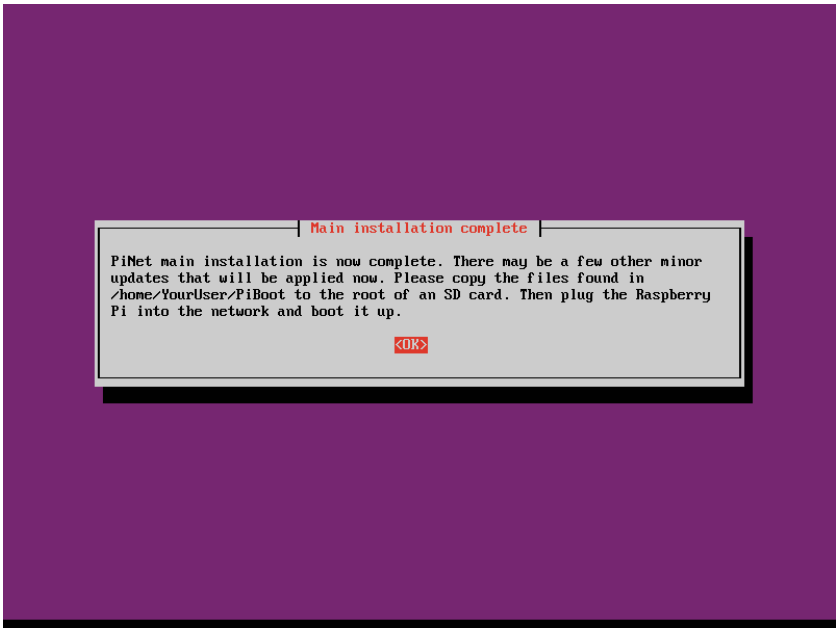

Additional information
Thanks for taking the time to read through (and if possible fill in) additional information. If you ever want to edit your information supplied, you can do so by selecting the "Other" menu and selecting "Edit-Information".
<OK>

The operating system will now **be compressed**. After every change made to the operating system, it must be recompressed which takes roughly 5 minutes normally, select **OK**





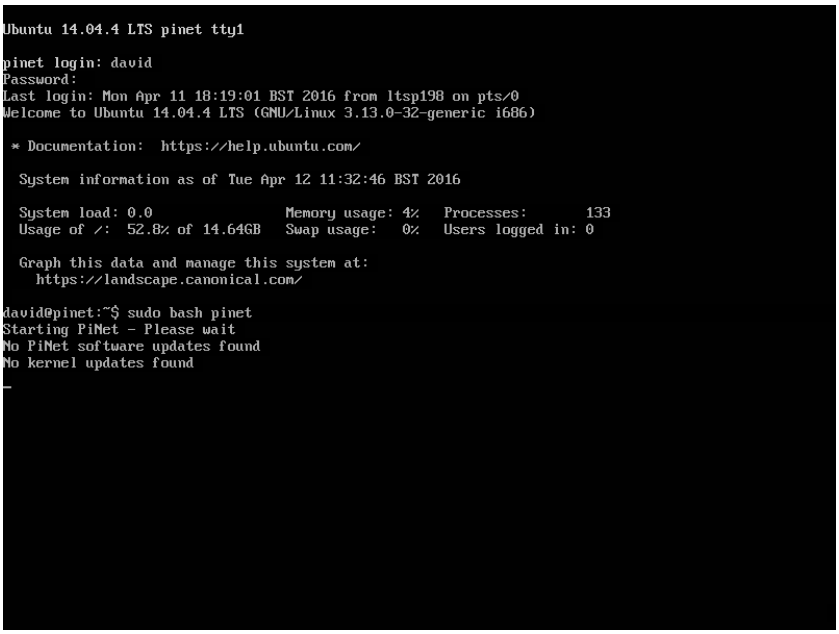
PiNet installation is now complete. The server has generated an **SD card image** which is located in **/home/YourUser/PiBoot**. You need to copy these files onto a blank formatted SD card and connect the Raspberry Pi to the network.



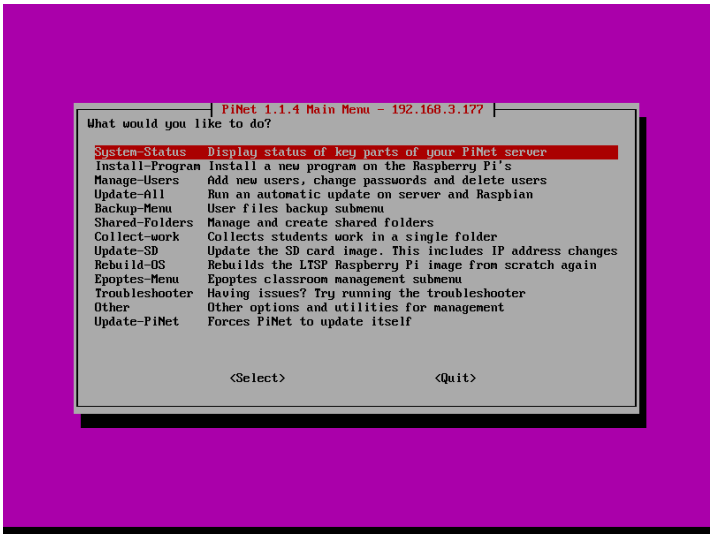
Starting the server and setup users and shared folders

To start **Pinet server** write

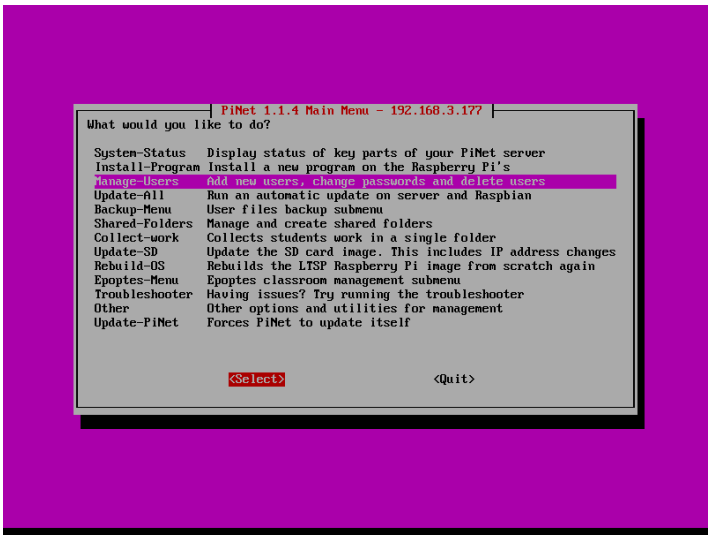
```
sudo bash pinet
```

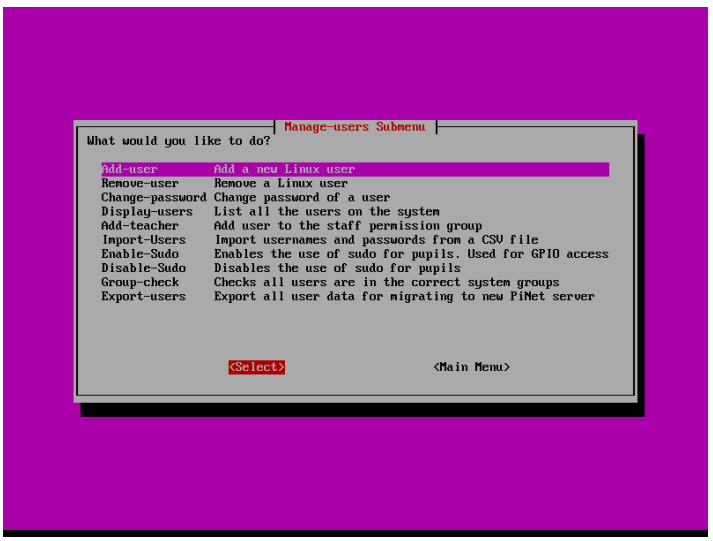


Pinet server main menu dialog



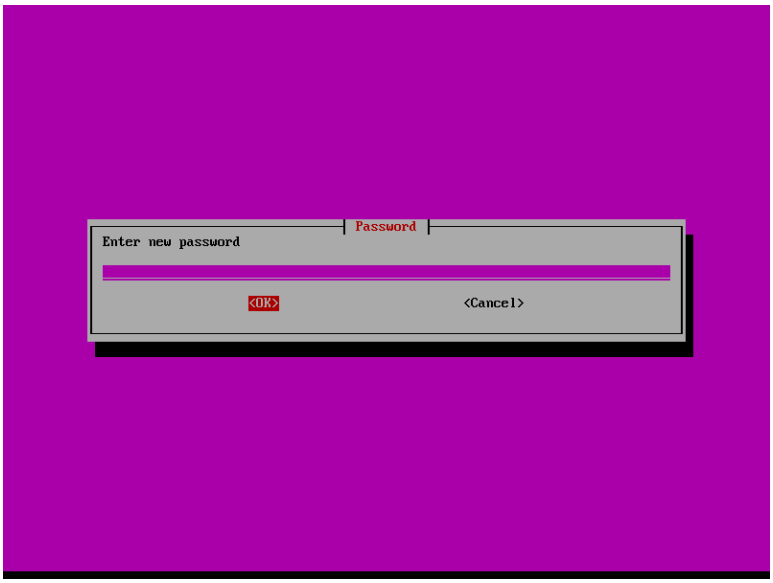
To add users select **Manage-Users** and in next dialog box **Add-user**

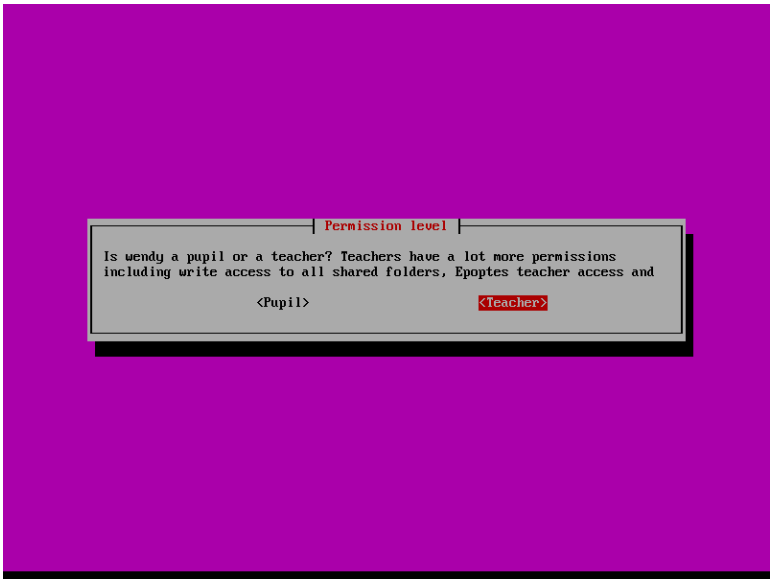


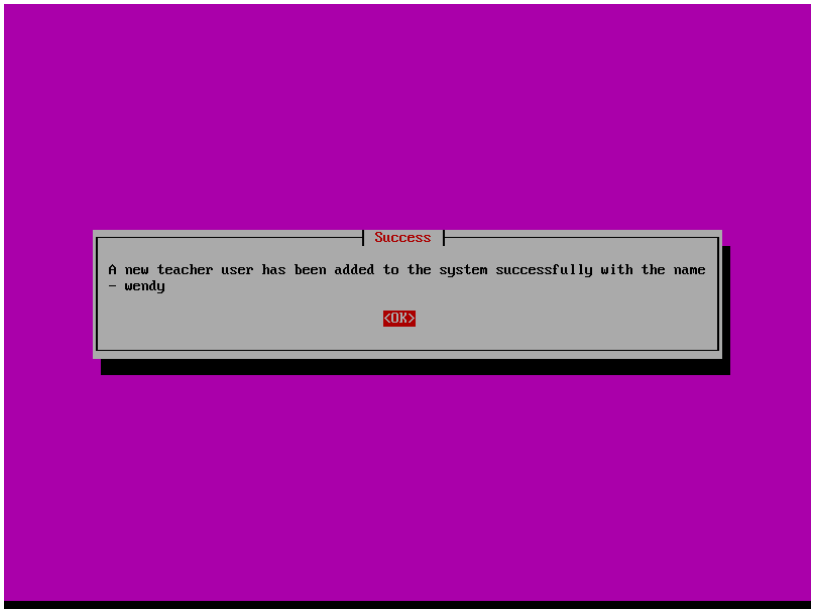


Choose **username**, **password** and if it's a **teacher** or a **pupil**


Username
Enter new username
wendy
<OK>
<Cancel>


Password
Enter new password
<OK>
<Cancel>


Permission level
Is wendy a pupil or a teacher? Teachers have a lot more permissions
including write access to all shared folders, Epoptes teacher access and
<Pupil>
<Teacher>



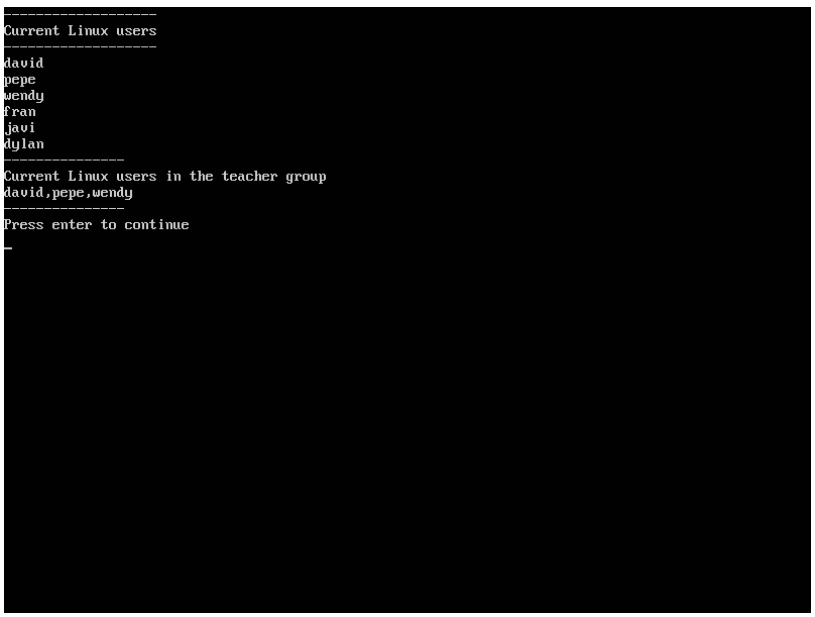
These are the users I've created

Teachers

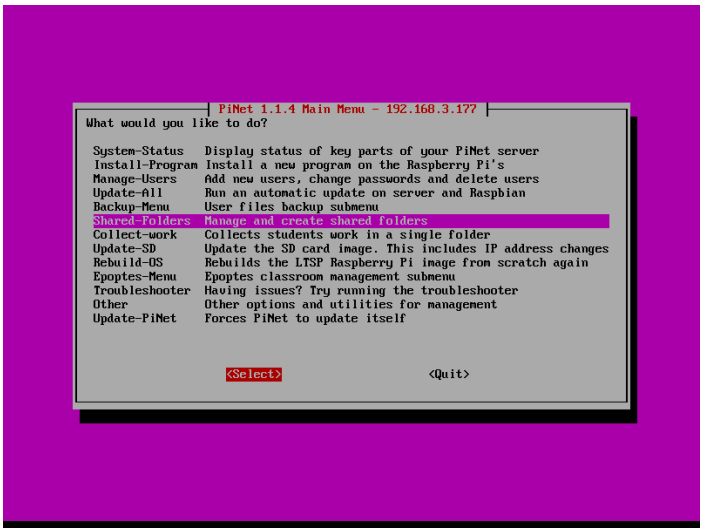
- david
- wendy
- pepe

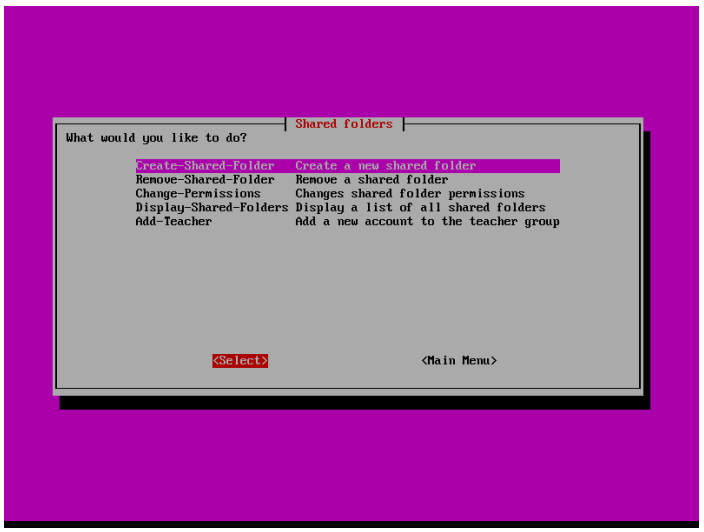
Pupils

- fran
- javi
- dylan

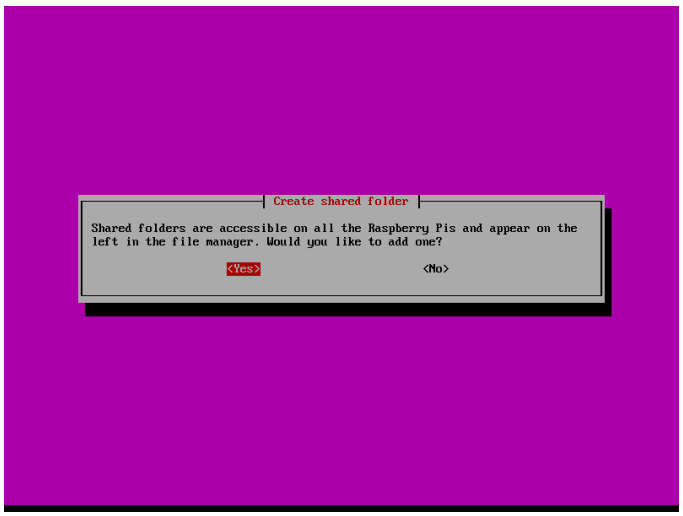


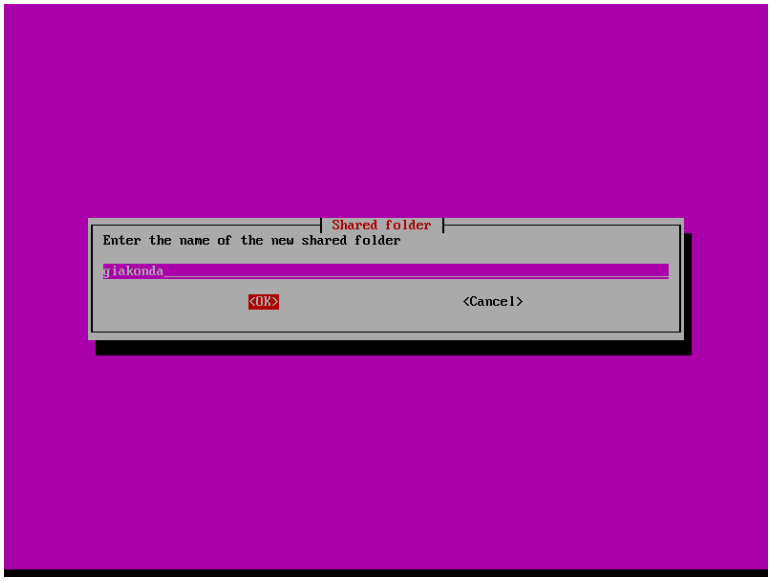
To add shared folders select **Shared-Folders** and in next dialog box **Create-Shared-Folder**

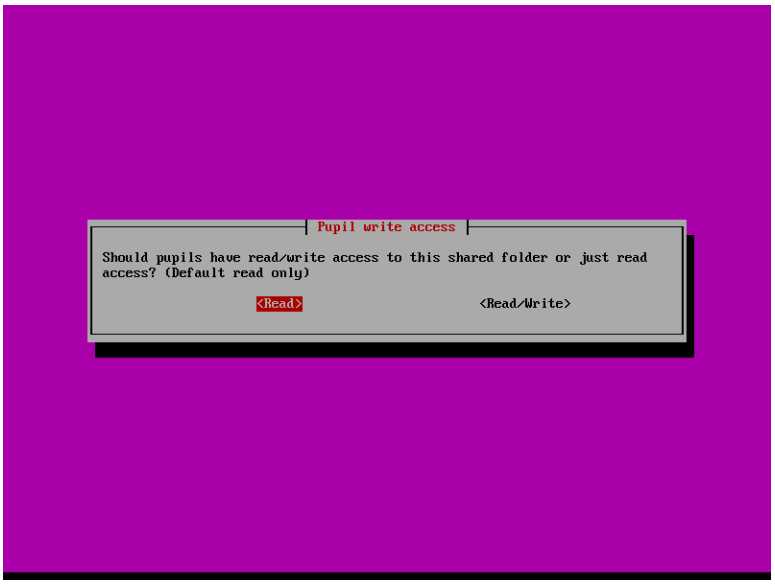


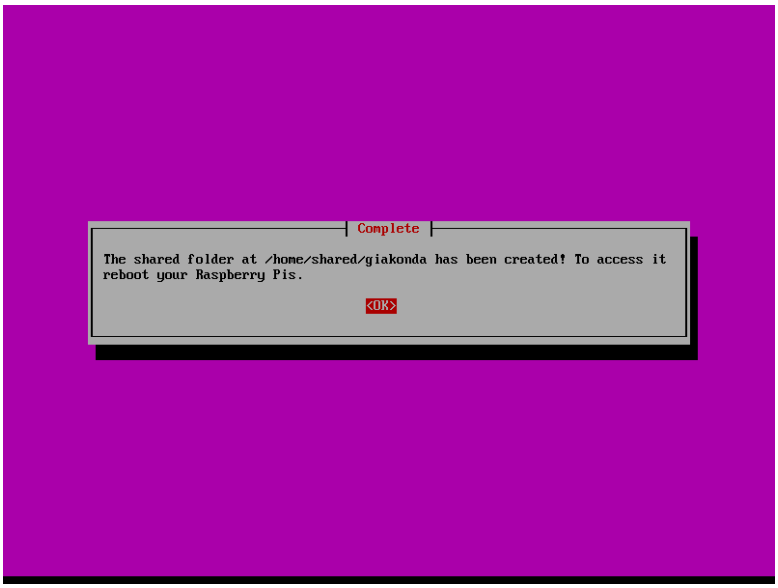


Choose if you want it to appear in the Rasperry PI file manager, the **name**, and **read** or **read/write** access for pupils




Shared folder
Enter the name of the new shared folder
giakonda
<OK>
<Cancel>


Pupil write access
Should pupils have read/write access to this shared folder or just read access? (Default read only)
<Read>
<Read/Write>


Complete
The shared folder at /home/shared/giakonda has been created! To access it reboot your Raspberry Pis.
<OK>

These are the **Shared Folders** I've created

Pupils read/write

- pupils

Pupils read

- giakonda

For more information about **Users** and **Shared Folders** management go to:

Pinet website

Copy boot files to a Sd Card and check that works

Firstly format your **SD Card** with any application tool like **Disks** or any other you like as **MRB/DOS and FAT32**

Now connect the **SD Card** to our **Ubuntu Server**

Use **fdisk** command to know the name of our **SD Card** partition

```
sudo fdisk -l
```

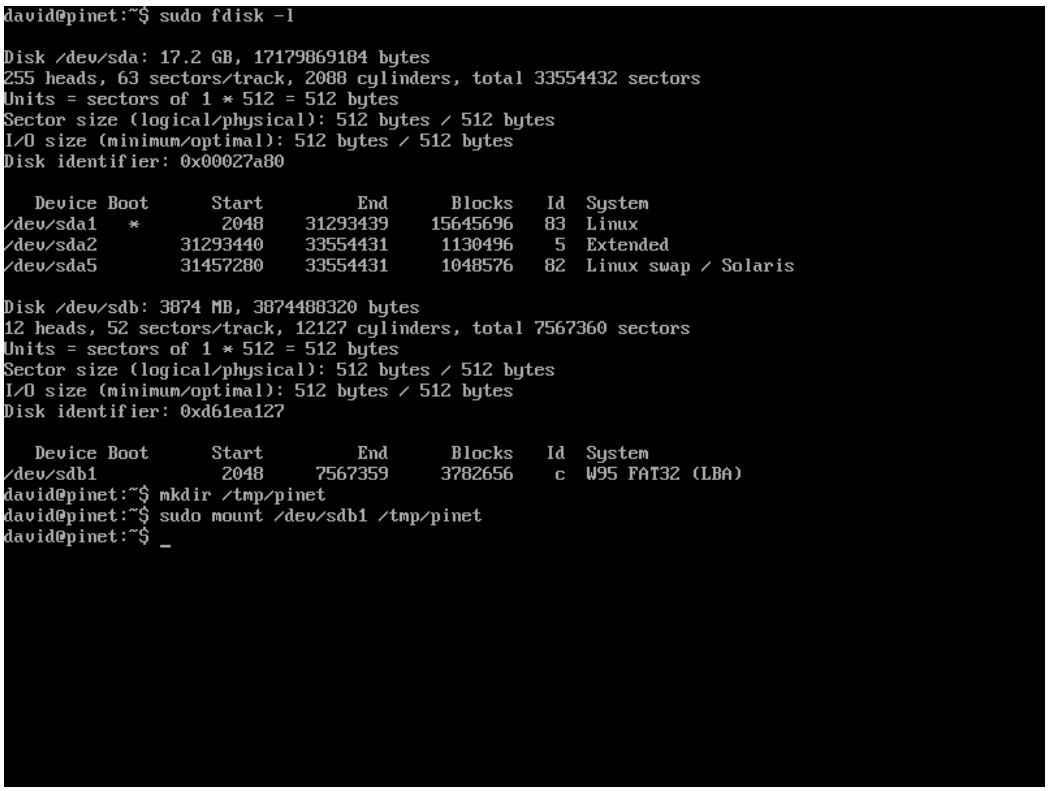
Find your device in the list. It is probably something like **/dev/sdb1** as mine one

Create a mount point

```
mkdir /tmp/pinet
```

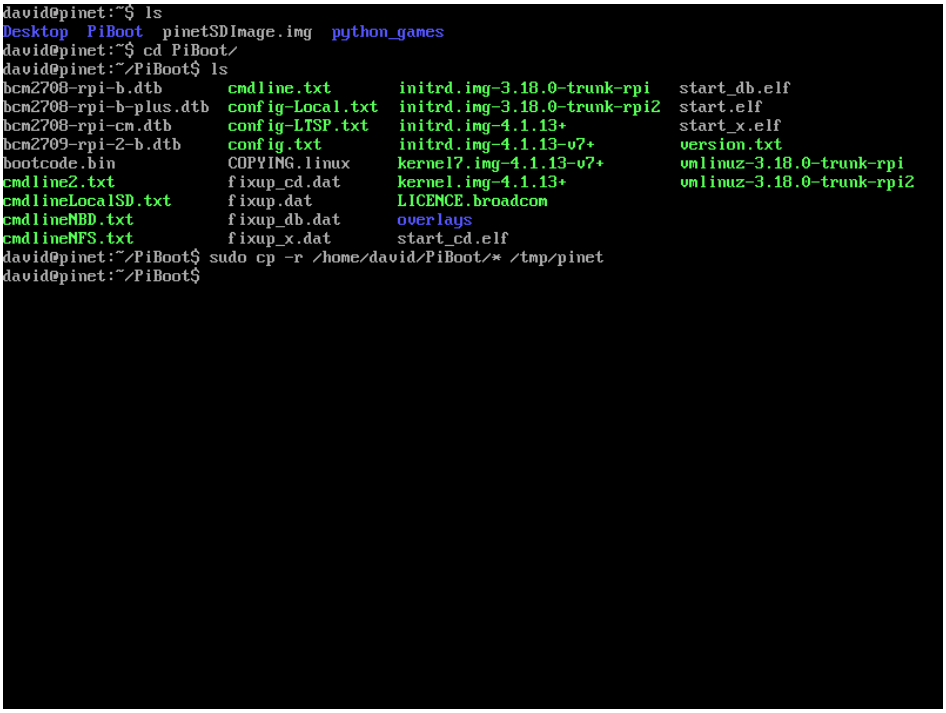
Mount the drive

```
sudo mount /dev/sdb1 /tmp/pinet
```



Check if the Boot files are **in /home/Youruser/PiBoot** and if everything is ok copy them to the **SD Card** mount point with this command

```
Sudo cp -r /home/Youruser/PiBoot/* /tmp/pinet
```

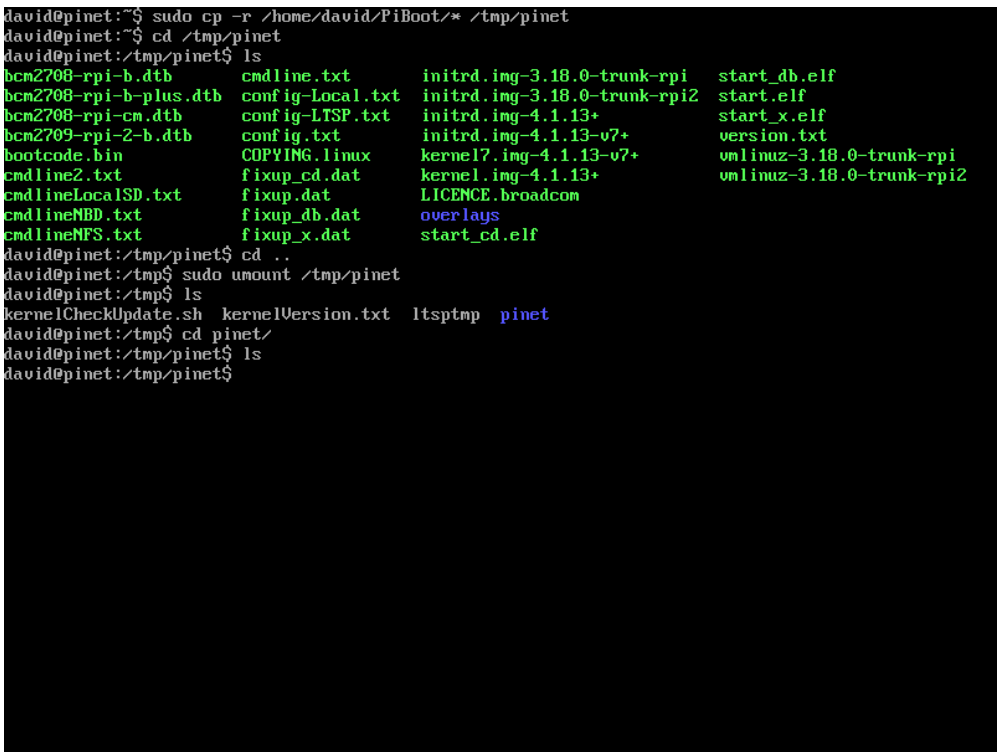


Check that the files has been copied to our **SD Card** with this commands

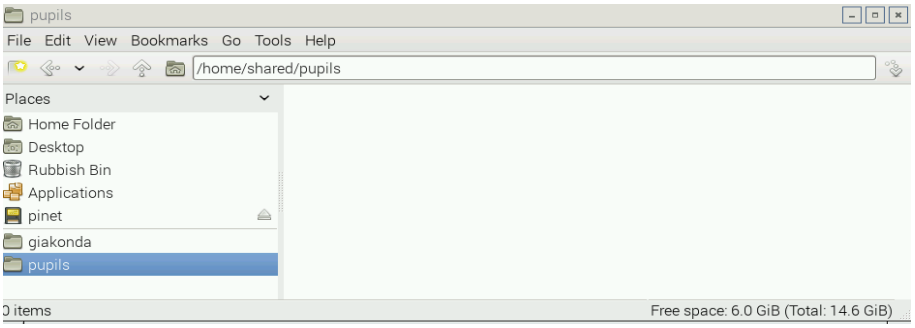
```
cd /tmp/pinet
ls
```

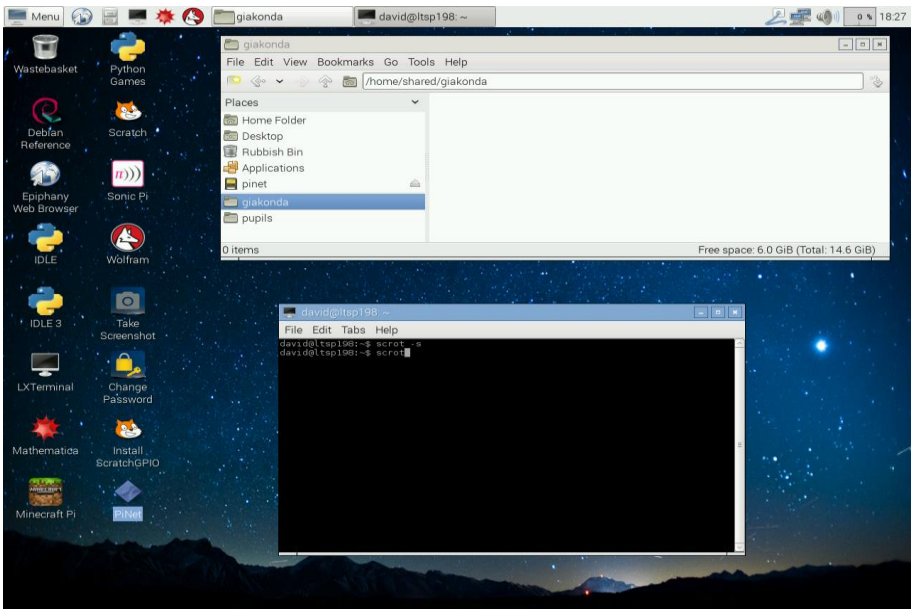
And unmount the **SD Card**

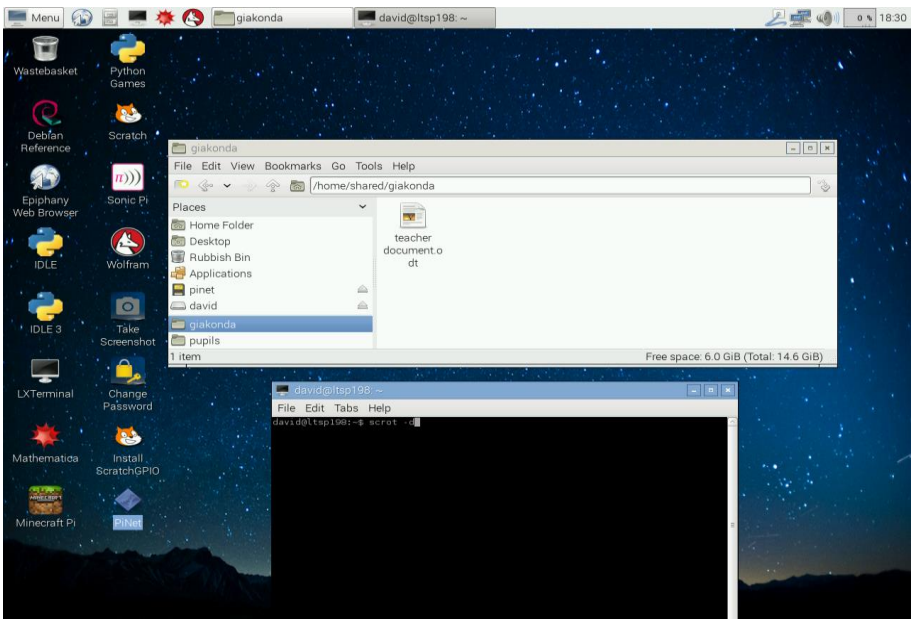
```
sudo unmount /tmp/pinet
```



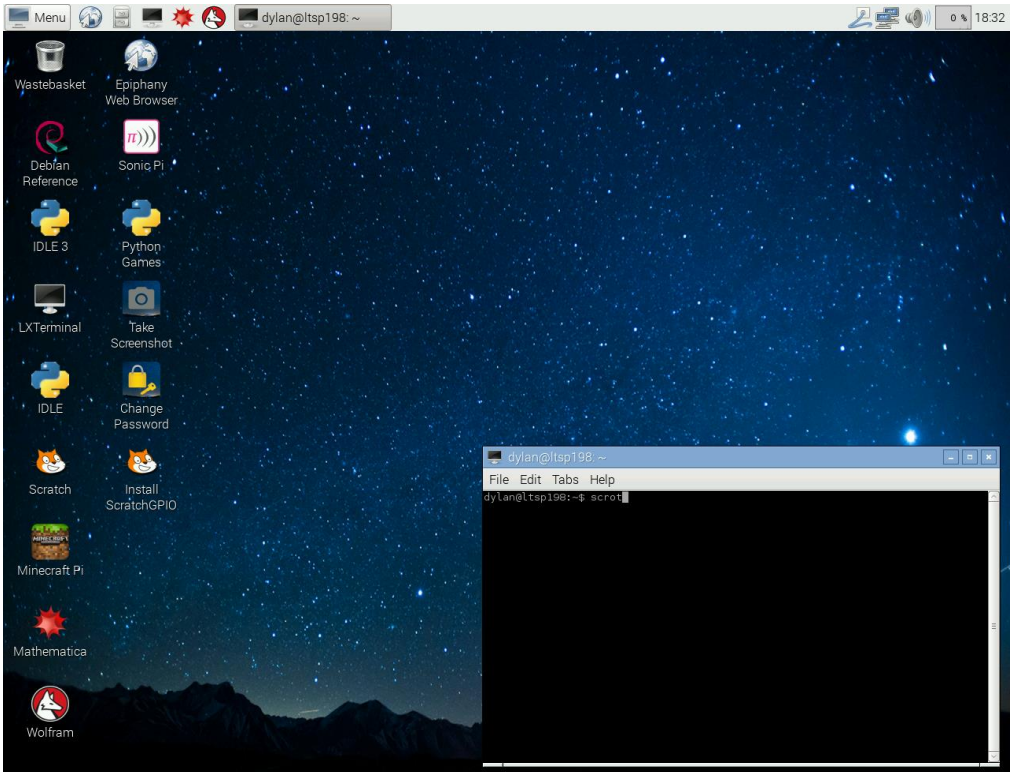
Now insert the **SD Card** in any **Rasperry PI** and check if works, firstly I login with **david (teacher user)** check that everything works and we have access to **Shared Folders** (**giakonda** and **pupils**) and create a file in **giakonda** (teachers have **read/write** permissions)

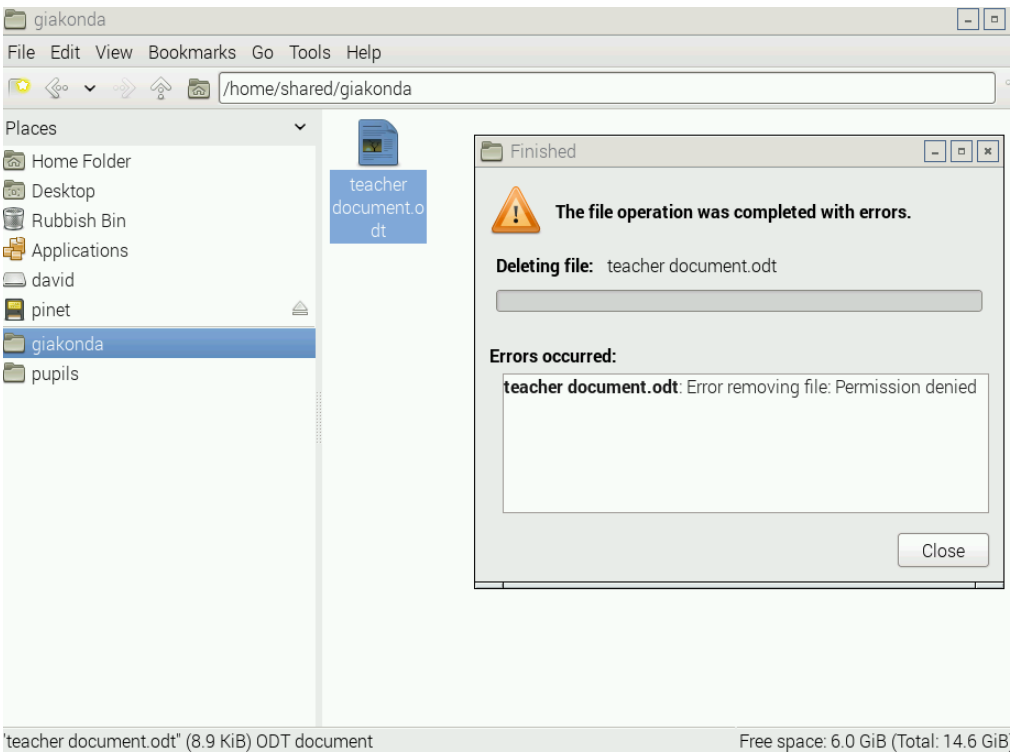






Now logoff and login again with any pupil, for example **dylan** (just **read** permissions in **giakonda** folder) and when I try to modify or erase the **teacher document.odt** server doenst allow me to do it.





So everything is working **perfectly!!!**