User's Manual

Arch Linux Installer

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Revision Sheet

Release No.	Date	Revision Description
Rev. 0	19/05/15	User's Manual Template
Rev. 1	30/05/15	Finished all the points.
Rev. 2	01/06/15	Rewrited all the points.
Rev. 3	04/06/15	PDF Conversion

USER'S MANUAL

TABLE OF CONTENTS

1.0   GENERAL INFORMATION

1.0   GENERAL INFORMATION

1.1   System Overview

The name of our project is "Arch Linux Installer", is a volunteer project we made to speed up the installation of Arch Linux and after the installation install some specific servers, desktop environments, change the default shell

In the installation of Arch Linux there are many commands to remember, after the reboot you still need writing commands to finish the installation.

With our installer you only have to worry for have an active internet connection (WiFi or Ethernet it doesn't matter).

In the first boot we offer you install any of the desktop environments, you also can change the shell with another interactive menu and a complete automatic installation for a specific servers.

1.2   Authorized Use Permission

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along with this program. If not, see <http://www.gnu.org/licenses/>

1.3   Points of Contact

1.3.1 Help Desk

If you have any kind of problem we provide you a list of Email that maybe could help to resolve your problem.

aquinceno@iespuigcastellar.xeill.net *(Andrés Quiceno)*

mgordillo@iespuigcastellar.xeill.net *(Mario Gordillo)*

1.4   Organization of the Manual

The organization is made as follows:
A little summary.
License.
Help section.
Meaning of acronyms and abbreviations
First Steps, how to get our installer.
The whole installation.

1.5   Acronyms and Abbreviations
CD → Compact Disc
PC → Personal Computer
SSD → Solid State Disk
HDD → Hard Disk Drive
RAM → Random Access Memory
VRAM → Video Random Access Memory
USB → Universal Serial Bus
KB → KiloByte
MB → MegaByte
GB → GigaByte
TB → TeraByte
PB → PetaByte
GRUB → Grand Unified Bootloader

2.0   SYSTEM SUMMARY

2.0 SYSTEM SUMMARY

2.1   System Configuration

Minimum requirements:

- An intermediate knowledge of Linux.

- An i686-based or x86-64 computer (PPro, Pentium 2 or higher, Athlon/Duron, etc.
    Note that AMD K6, Transmeta Crusoe, CyrixIII, and VIA-C3 are NOT supported.)

- 256 MB RAM

- 4 MB de VRAM.

- 1 GB of free space in HDD

3.0   First Steps

3.0 FIRST STEPS

3.1 Download section

There are two ways to use our project, first download a clean Arch Linux ISO and later clone the project from a git.
The other way is downloading our ISO with the project.
Depending from where do you go download it, we provide you a hypelinks to the following section:

Clean Arch Linux ISO

Arch Linux ISO with the installer

3.2 Execution

Depending from where you get the installer you must follow one or other instruction. Please follow the below instructions according to your Arch Linux ISO

CLEAN ARCH LINUX ISO

If you have a clean Arch Linux ISO, run it as usual, when you reach the terminal, write the following command to download the Installer:

pacman -Sy git

git clone https://github.com/mario/arch-installer.git

Enter to the installer folder and execute the first script.
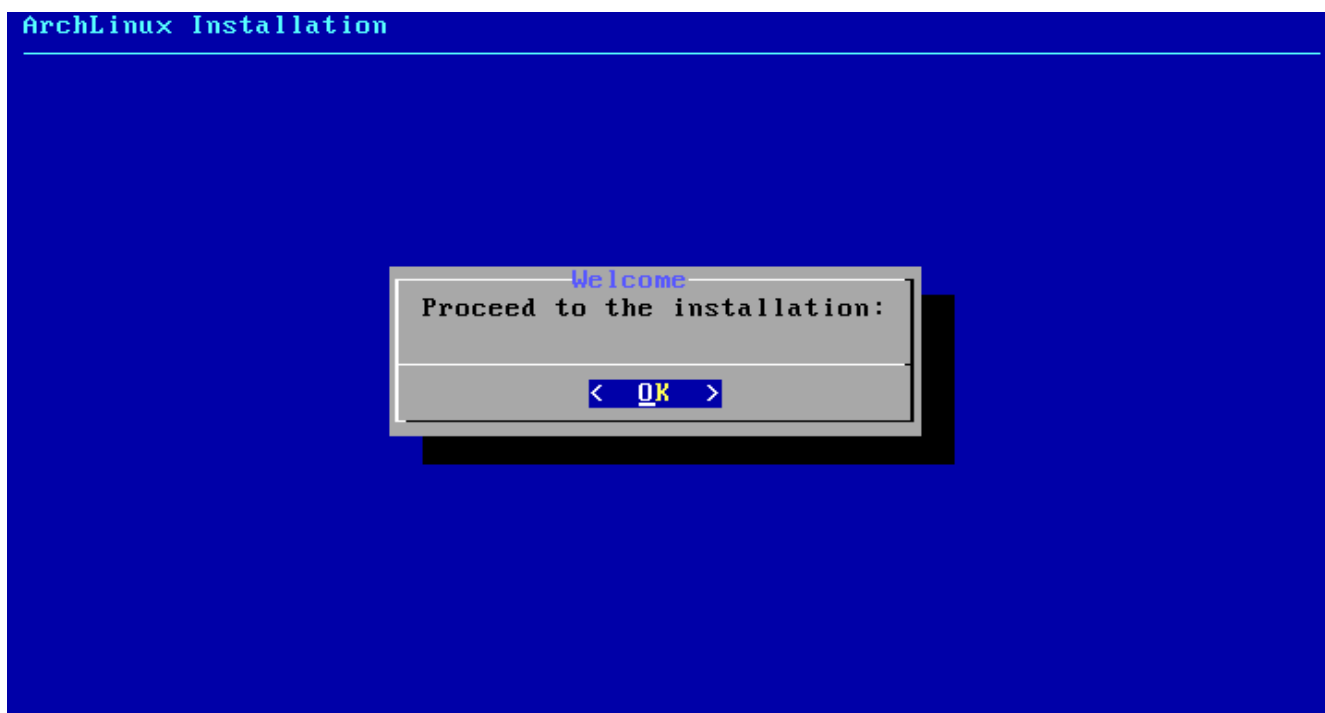
cd arch-installer
./Install.sh

ARCH LINUX ISO WITH INSTALLER

If you have our Arch Linux ISO, just go forward.
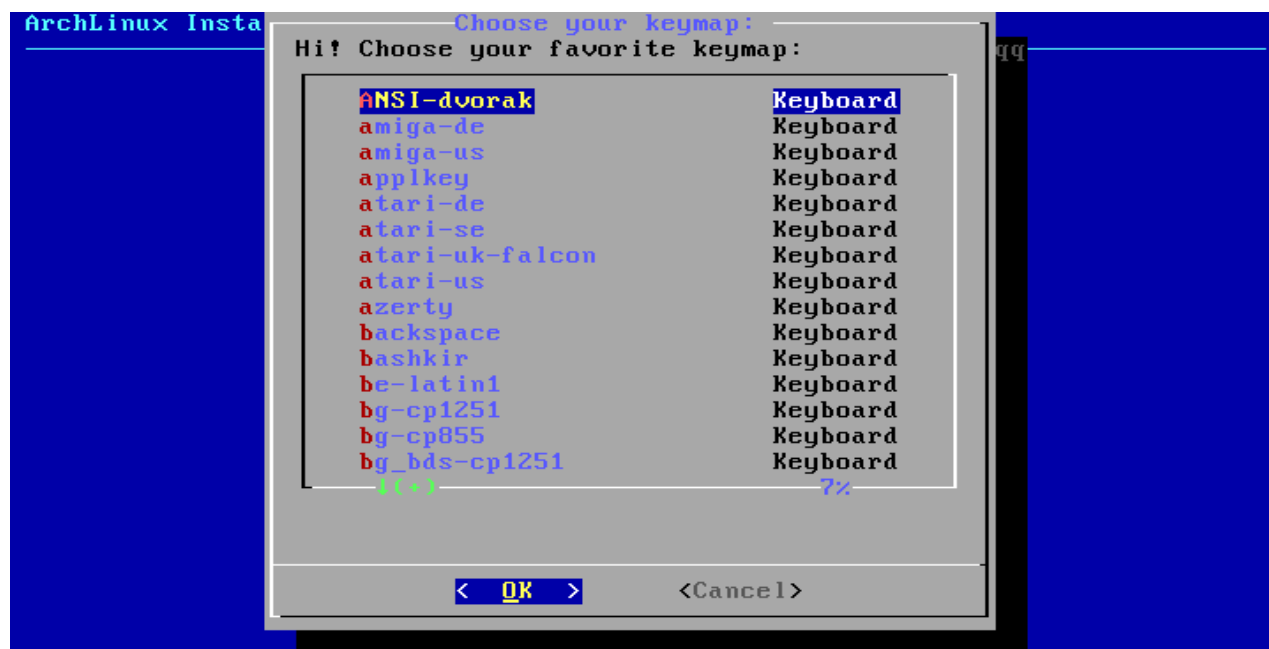The installer will start without doing anything.

4.0 INSTALLATION

Burn the ISO, make a bootable USB …

Execute the installation. If you use our ISO, the installer will boot automatic.

```
ArchLinux Installation

                    ┌──────Welcome──────┐
                    │ Proceed to the installation: │
                    │                              │
                    │                              │
                    │        <   OK   >           │
                    └──────────────────────────────┘
```

Choose your keymap

```
ArchLinux Insta┌──────Choose your keymap:──────┐qq─────────
               │ Hi! Choose your favorite keymap:          │
               │                                           │
               │  ┌──────────────────────────────────────┐ │
               │  │ ANSI-dvorak         Keyboard          │ │
               │  │ amiga-de            Keyboard          │ │
               │  │ amiga-us            Keyboard          │ │
               │  │ applkey             Keyboard          │ │
               │  │ atari-de            Keyboard          │ │
               │  │ atari-se            Keyboard          │ │
               │  │ atari-uk-falcon     Keyboard          │ │
               │  │ atari-us            Keyboard          │ │
               │  │ azerty              Keyboard          │ │
               │  │ backspace           Keyboard          │ │
               │  │ bashkir             Keyboard          │ │
               │  │ be-latin1           Keyboard          │ │
               │  │ bg-cp1251           Keyboard          │ │
               │  │ bg-cp855            Keyboard          │ │
               │  │ bg_bds-cp1251       Keyboard          │ │
               │   ↓(+)                      7%           │ │
               │  └──────────────────────────────────────┘ │
               │                                           │
               │       <   OK   >        <Cancel>          │
               └───────────────────────────────────────────┘
```

If you need to connect to a Wi-Fi just configure it.

```
ArchLinux Installation


                        WiFi Connection
              Do you want to connect to a wifi network?


                    < Yes >        < No  >
```

Disk Selection.

```
ArchLinux Installation


                        Disk Selection
              Please select a disk to install ArchLinux

                           <  OK  >
```
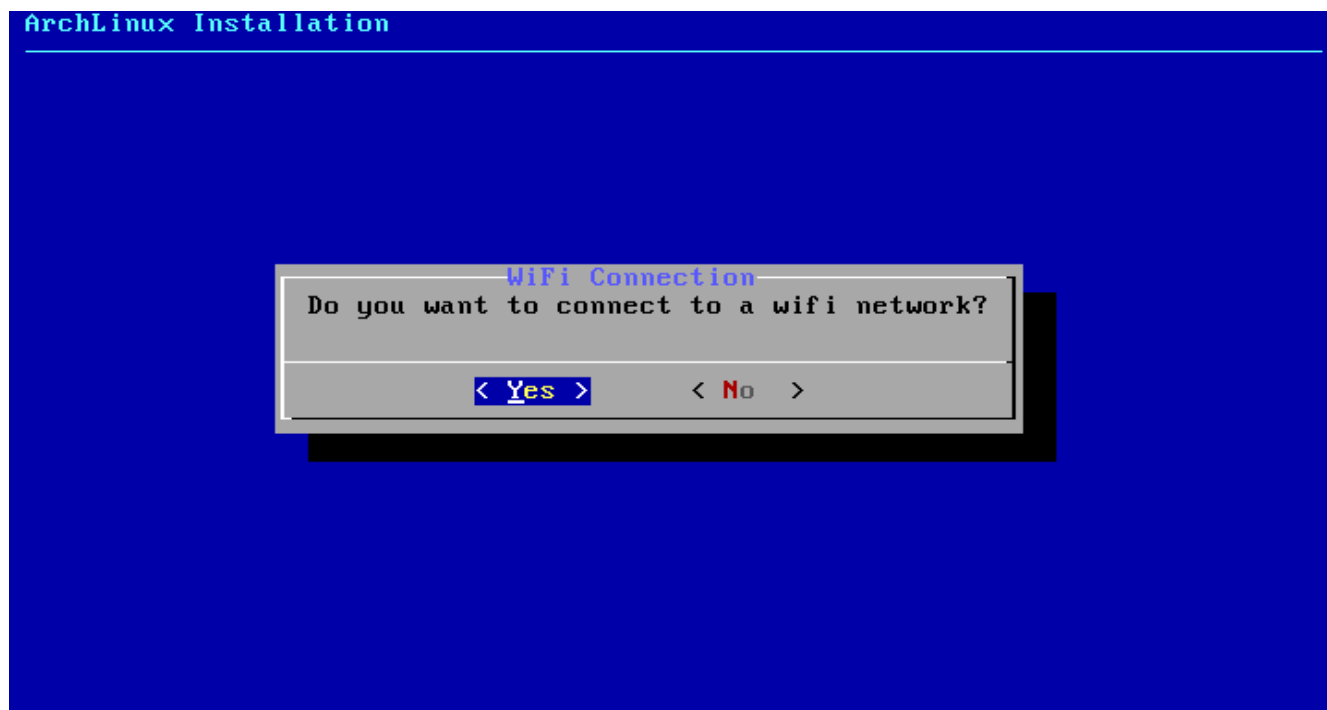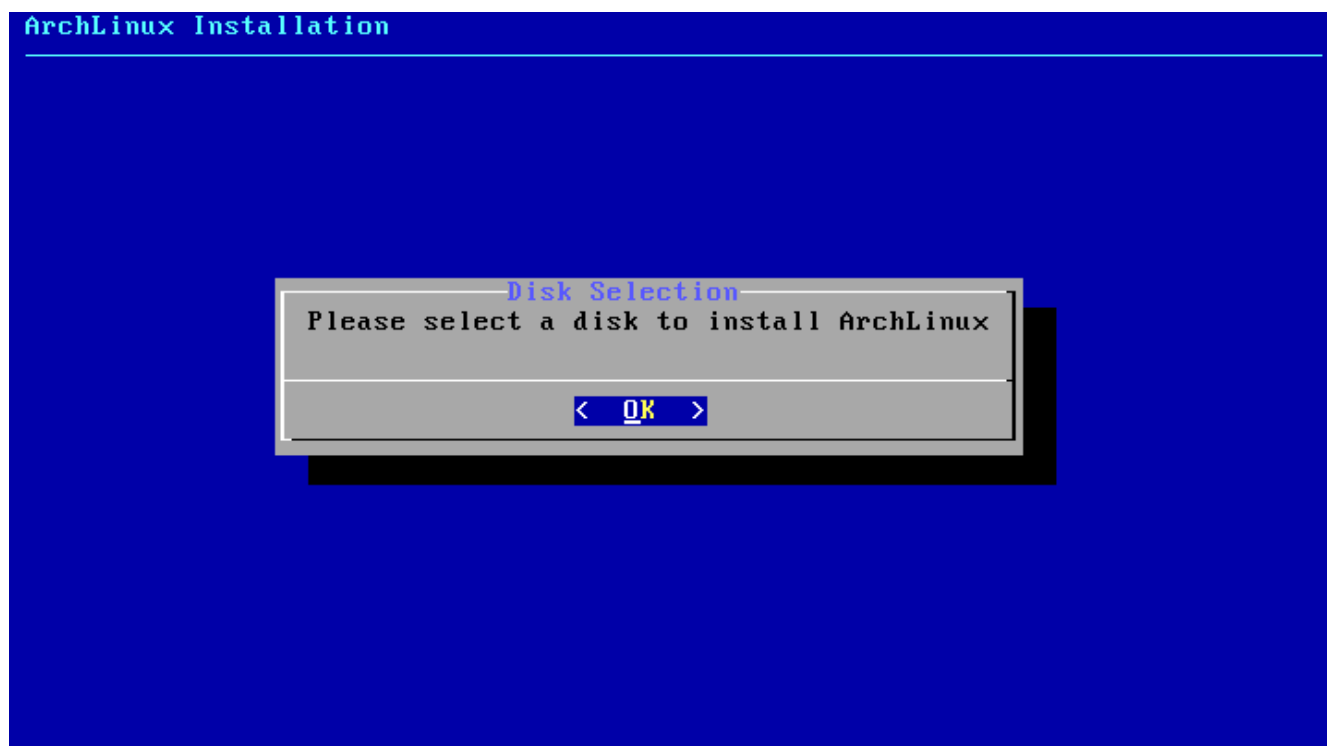
You will be able to see all the available disks.

```
                          Disk Selection
 Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors
 Units: sectors of 1 * 512 = 512 bytes
 Sector size (logical/physical): 512 bytes / 512 bytes
 I/O size (minimum/optimal): 512 bytes / 512 bytes


 Disk /dev/loop0: 272 MiB, 285184000 bytes, 557000 sectors
 Units: sectors of 1 * 512 = 512 bytes
 Sector size (logical/physical): 512 bytes / 512 bytes
 I/O size (minimum/optimal): 512 bytes / 512 bytes


 Disk /dev/loop1: 32 GiB, 34359738368 bytes, 67108864 sectors
 Units: sectors of 1 * 512 = 512 bytes
 Sector size (logical/physical): 512 bytes / 512 bytes
 I/O size (minimum/optimal): 512 bytes / 512 bytes


 Disk /dev/loop2: 256 MiB, 268435456 bytes, 524288 sectors
 Units: sectors of 1 * 512 = 512 bytes
      -(+)-                                                  68%-
                         < EXIT >
```

Select the disk you will use to install Arch Linux.

```
ArchLinux Installation


                       Disk Select:
                 Choose the Hard Drive that
                 you want to use

                    /dev/sda  (8590MB)



                 <   OK   >   <Cancel>
```

For create the partitions Arch Linux have 3 programs, select which do you want to use.

```
ArchLinux Installation
_____

              Choose partition maker program:
      Choose  your favorite partitioner:
      ┌──────────────────────────────────────────────┐
      │  cfdisk   A ncurses based partitioner          │
      │  fdisk    A command line MBR partitioner        │
      │  parted   A command line partitioner            │
      │                                                │
      │                                                │
      └──────────────────────────────────────────────┘
              <  OK  >          <Cancel>
```
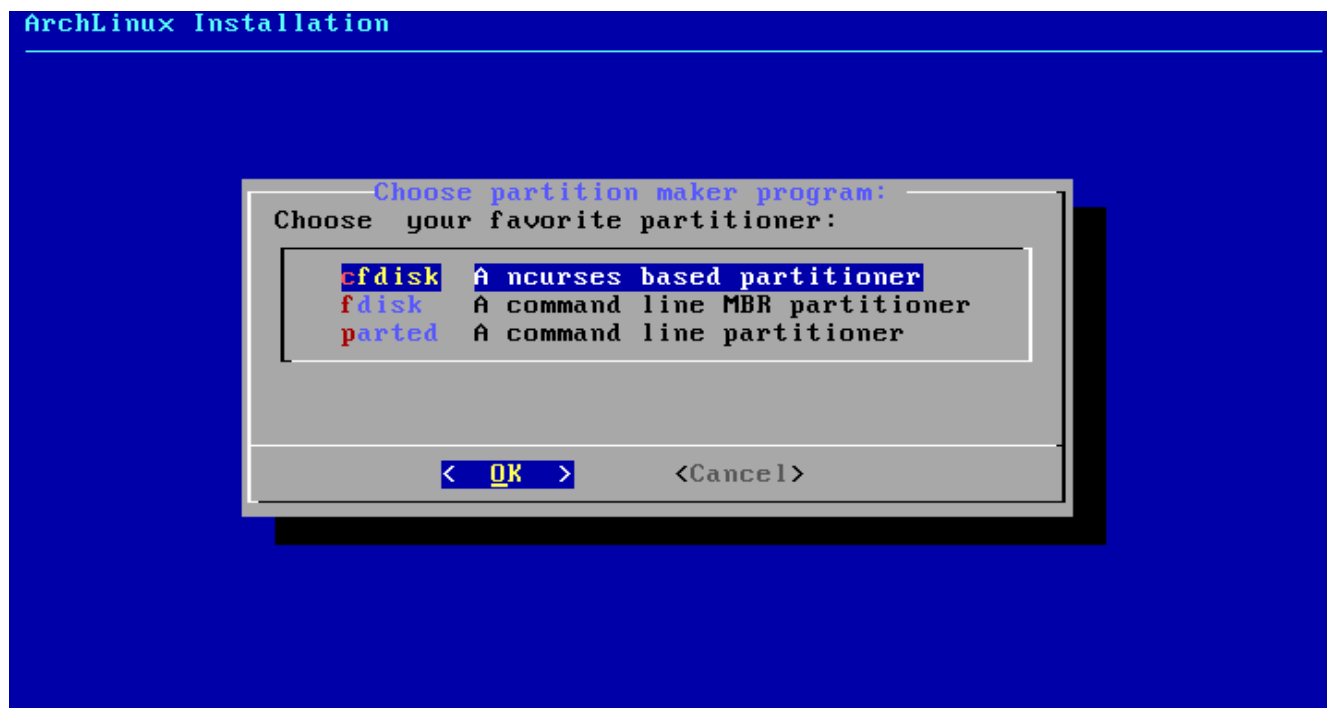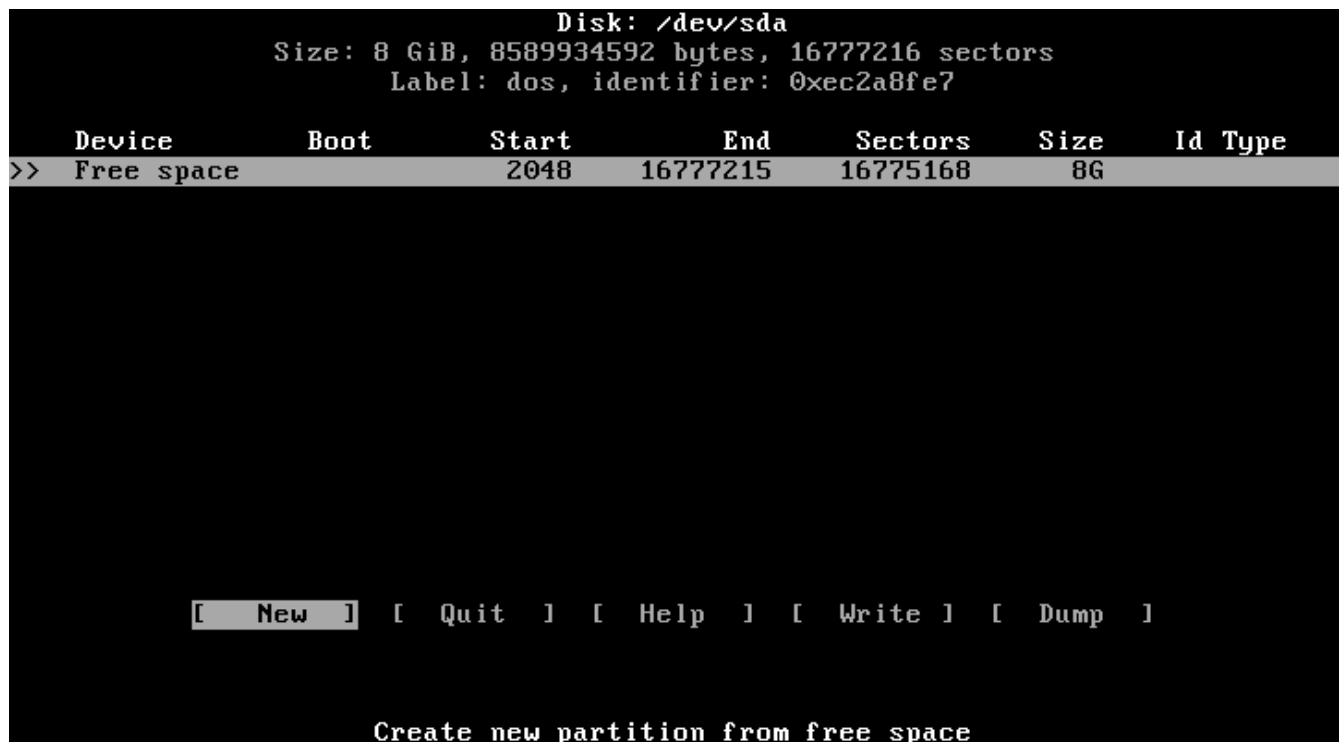
CFDISK

First af all you must select the type of partition table. Choose "dos", this is because our installer, at the moment, doesn't support the GTP partition table
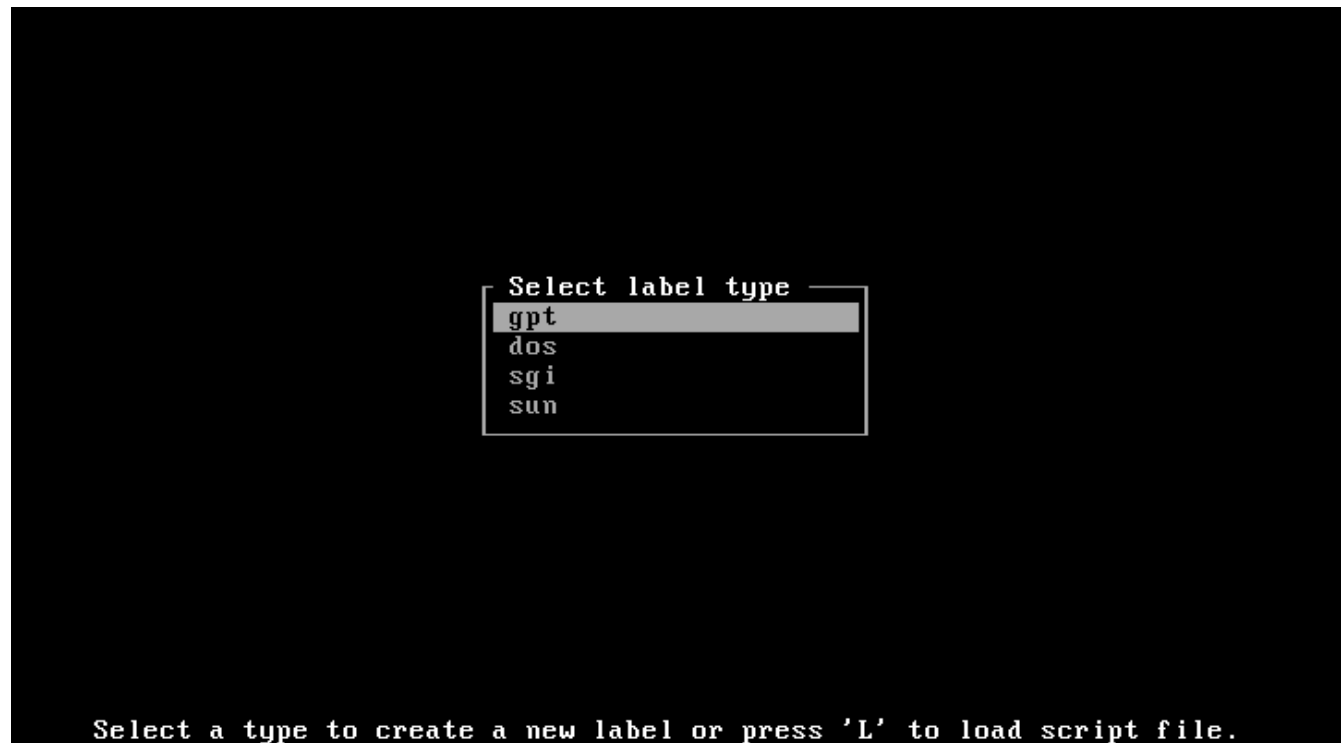
This is the menu of CFDISK.

To made a new partition select "New", write how many space you want to use for Arch Linux (Is good to have a partition for a SWAP. **Note: Create many partitions as you need, later you will be able to mount the system (home, srv, opt...) in differents partitions.**)

```
                        Disk: /dev/sda
           Size: 8 GiB, 8589934592 bytes, 16777216 sectors
                Label: dos, identifier: 0xec2a8fe7

     Device        Boot        Start          End      Sectors      Size    Id Type
>>   Free space                 2048     16777215     16775168       8G










  Partition size: 8G_



      May be followed by M for MiB, G for GiB, T for TiB, or S for sectors.
```

Select if the new partition it going to be a **Primary partition** or an **Extended partition**.

```
                        Disk: /dev/sda
           Size: 8 GiB, 8589934592 bytes, 16777216 sectors
                Label: dos, identifier: 0xec2a8fe7

     Device        Boot        Start          End      Sectors      Size    Id Type
>>   Free space                 2048     16777215     16775168       8G











                    [ primary]   [extended]


                 0 primary, 0 extended, 4 free
```

The partition is created.

```
                        Disk: /dev/sda
           Size: 8 GiB, 8589934592 bytes, 16777216 sectors
                  Label: dos, identifier: 0xec2a8fe7

      Device        Boot        Start        End     Sectors    Size   Id Type
>>    /dev/sda1                  2048    10487807    10485760     5G   83 Linux
      Free space             10487808    16777215     6289408     3G




      [Bootable]   [ Delete ]   [  Quit  ]   [  Type  ]   [  Help  ]   [  Write ]
      [  Dump  ]


              Quit program without writing partition table
```

To write the changes go to "Write" press enter

```
                        Disk: /dev/sda
           Size: 8 GiB, 8589934592 bytes, 16777216 sectors
                  Label: dos, identifier: 0xec2a8fe7

      Device        Boot        Start        End     Sectors    Size   Id Type
>>    /dev/sda1                  2048    10487807    10485760     5G   83 Linux
      Free space             10487808    16777215     6289408     3G




      [Bootable]   [ Delete ]   [  Quit  ]   [  Type  ]   [  Help  ]   [  Write ]
      [  Dump  ]


          Write partition table to disk (this might destroy data)
```

It will ask if you really want to write the changes.
To exit the program goes to "Quit".

```
                        Disk: /dev/sda
          Size: 8 GiB, 8589934592 bytes, 16777216 sectors
                Label: dos, identifier: 0xec2a8fe7

      Device      Boot        Start        End     Sectors    Size   Id Type
>>    /dev/sda1                2048   10487807    10485760     5G   83 Linux
      Free space           10487808   16777215     6289408     3G




















Are you sure you want to write the partition table to disk? yes_



        Type "yes" or "no", or press ESC to leave this dialog.
```

FDISK

The disk need a partition table, fdisk create a DOS Partition Table. If you want another just select an available there are 4 partition tables:

g → GPT Partition Table
G → SGI (IRIX) Partition Table
o → DOS Partition Table
s → SUN Partition Table

```
Welcome to fdisk (util-linux 2.26.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table.
Created a new DOS disklabel with disk identifier 0x3b39e410.

Command (m for help): _
```

To see all the partitions available type "p"

```
Command (m for help): p
Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0xc4513440

Command (m for help): _
```

To create a new partition type "n"

```
Command (m for help): n
```

Select if the new partition it would be a **Primary partition** or an **extended partition**

```
Command (m for help): n
Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): _
```

Select the partition number, try to create it in order.

```
Command (m for help): n
Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): p
Partition number (1-4, default 1): _
```

To resize the partition in "First Sector" hit enter and in "Last sector" write the size of the partition (To write K,M,G,T,P always write + before the number.)

i.e.: +5120M

```
First sector (2048-16777215, default 2048):
Last sector, +sectors or +size{K,M,G,T,P} (2048-16777215, default 16777215): +51
20M

Created a new partition 1 of type 'Linux' and of size 5 GiB.

Command (m for help): _
```

To save the partition and exit the program just write "w".

```
Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.
```

PARTED

Create a new partition table. Here is a list of available partition table

```
        LABEL-TYPE is one of: aix, amiga, bsd, dvh, gpt, mac, msdos, pc98, sun,
        loop
```

To create a partition table, there are two commands "*mktable*" and "*mklabel*"

```
(parted) mktable msdos
```

To create a new primary partition you can use "*mkpart primary*" then, type "print" to see if the partition is created.
i.e.: *mkpart primary [First Sector] [Last Sector]*

Note: Creating the first partition, remember the GRUB need space too
The First and Last sector are in MB if you want 5GB write [First Sector] 5120

```
(parted) mkpart primary 1 5120
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 8590MB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start   End     Size    Type     File system  Flags
 1      1049kB  5120MB  5119MB  primary               lba

(parted) _
```

If you need to resize a partition use "resizepart" it only changes the Last sector of the partition

```
(parted) resizepart 1
```

Write the new size (always in MB) then type "yes" to write the changes.

```
End?  [5120MB]? 2048
Warning: Shrinking a partition can cause data loss, are you sure you want to
continue?
Yes/No? yes
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 8590MB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start   End     Size    Type     File system  Flags
 1      1049kB  2048MB  2047MB  primary               lba

(parted) _
```

To create a new extended partition you can use "*mkpart extended*", type "print" to see if the partition is created.

I.e. *mkpart extended 2049 500*

```
(parted) mkpart extended 2049 5000
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 8590MB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start    End     Size    Type      File system  Flags
 1      1049kB   2048MB  2047MB  primary                lba
 2      2049MB   5000MB  2951MB  extended               lba

(parted) _
```

To create a new logical partition use "*mkpart logical*", type "print" to see if the partition is created.

I.e. *mkpart logical 3000 4000*

```
(parted) mkpart logical 3000 4000
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 8590MB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start    End     Size    Type      File system  Flags
 1      1049kB   2048MB  2047MB  primary                lba
 2      2049MB   5000MB  2951MB  extended               lba
 5      3000MB   4000MB  1000MB  logical                lba

(parted) _
```
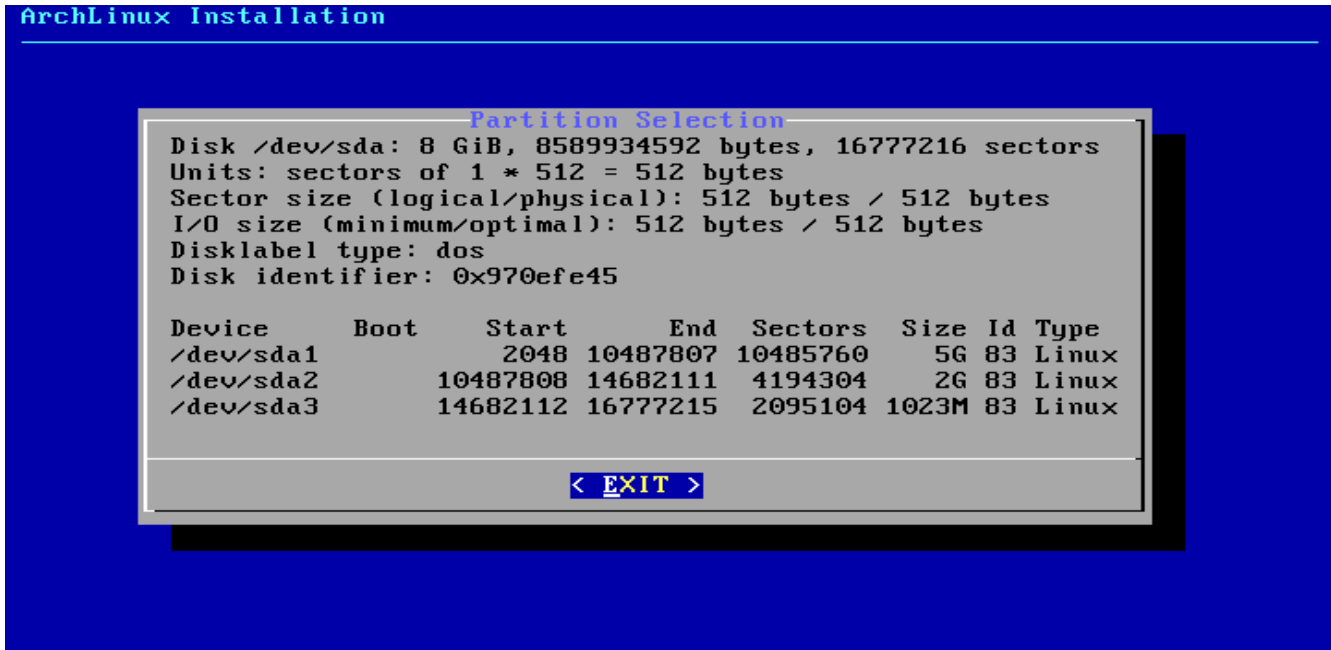
To remove a partition just type "*rm [number of the partition]*"

```
(parted) rm 2
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 8590MB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start    End     Size    Type      File system  Flags
 1      1049kB   2048MB  2047MB  primary                lba

(parted) _
```

After finish with the partitions, a menu will show you the partitions made it before.
(We create 3 partitions, 1 for /, other for /home and the last one for SWAP).

```
ArchLinux Installation

                         Partition Selection
      Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors
      Units: sectors of 1 * 512 = 512 bytes
      Sector size (logical/physical): 512 bytes / 512 bytes
      I/O size (minimum/optimal): 512 bytes / 512 bytes
      Disklabel type: dos
      Disk identifier: 0x970efe45

      Device      Boot     Start       End   Sectors  Size Id Type
      /dev/sda1            2048  10487807  10485760    5G 83 Linux
      /dev/sda2        10487808  14682111   4194304    2G 83 Linux
      /dev/sda3        14682112  16777215   2095104 1023M 83 Linux


                           < EXIT >
```

Select in which partition Arch Linux will install.

```
ArchLinux Installation



                    Partition selection:
                    Choose the partition that
                    you want to use for: /

                      /dev/sda1  5G
                      /dev/sda2  2G
                      /dev/sda3  1023M



                     <  OK  >   <Cancel>
```

Select the file system of the partition.

```
ArchLinux Installation        Partition type:
                        Choose the filesystem type      qq
                        that you want to use

                             btrfs        Type
                             ext2         Type
                             ext3         Type
                             ext4         Type
                             ext4dev      Type
                             f2fs         Type
                             fat          Type
                             jfs          Type
                             nilfs2       Type
                             ntfs         Type
                             reiserfs     Type
                             vfat         Type
                             xfs          Type



                          <  OK  >    <Cancel>
```
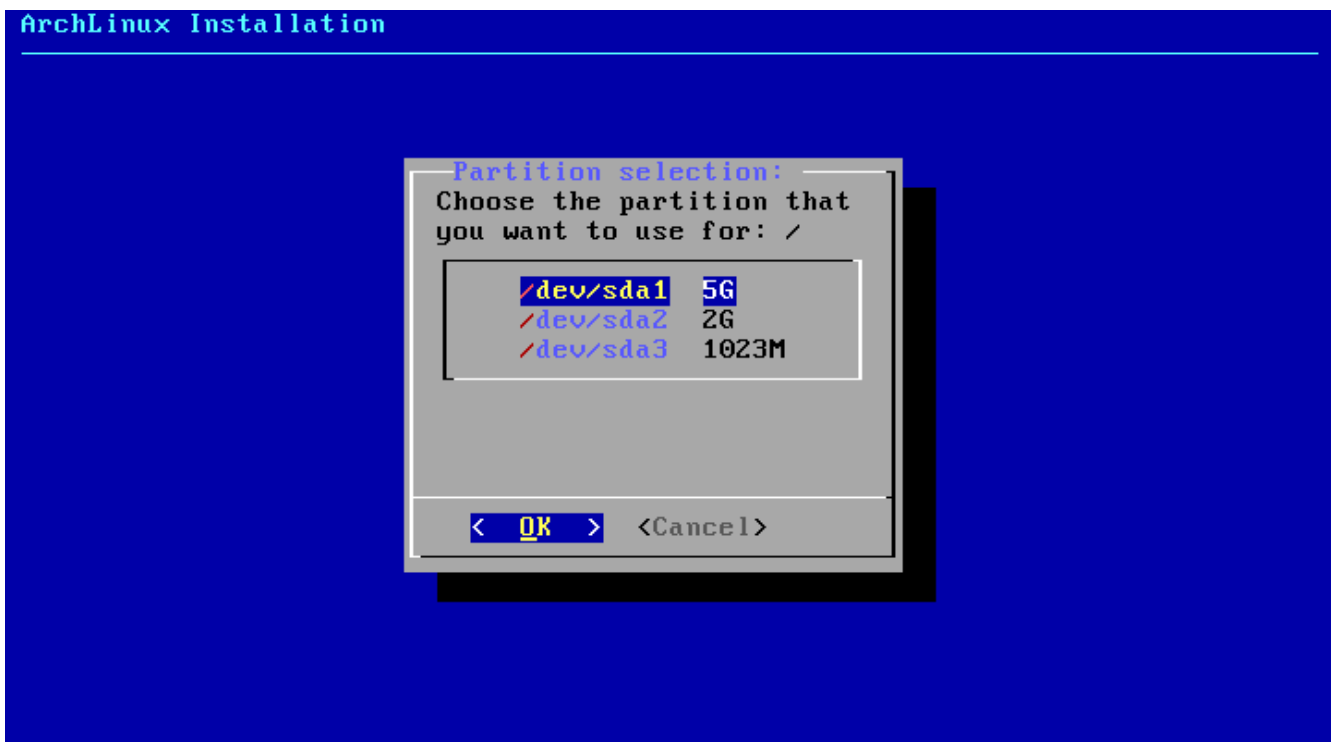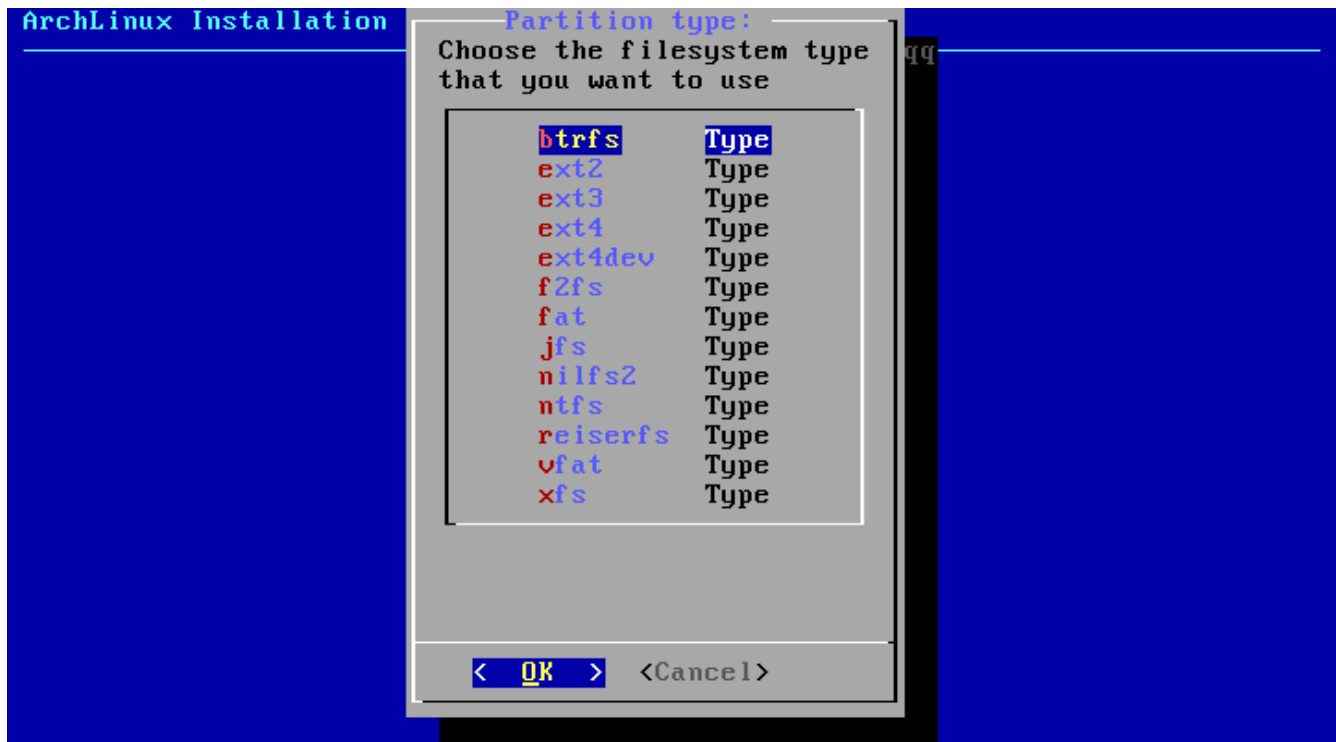
If you want to mount a system folder in a specific partition select the folder with "Spacebar"

```
ArchLinux Installation


        Select options:

            [ ] /boot    Static files of the boot loader
            [ ] /home    User home directoties
            [ ] /tmp     Temporary files
            [ ] /usr     Static data
            [ ] /var     Variable data
            [ ] /srv     Data for services provided by this system
            [ ] /opt     Add-on aplication software packages
            [ ] swap     Swap file sytem




                  <  OK  >        <Cancel>
```

If you have selected a folder to be mounted you will see the partitions available.

```
ArchLinux Installation

                      ┌──────────Partition Selection──────────┐
                      │ Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors │
                      │ Units: sectors of 1 * 512 = 512 bytes  │
                      │ Sector size (logical/physical): 512 bytes / 512 bytes │
                      │ I/O size (minimum/optimal): 512 bytes / 512 bytes │
                      │ Disklabel type: dos                    │
                      │ Disk identifier: 0x970efe45            │
                      │                                        │
                      │ Device     Boot    Start      End   Sectors  Size Id Type │
                      │ /dev/sda1          2048 10487807 10485760    5G 83 Linux │
                      │ /dev/sda2      10487808 14682111  4194304    2G 83 Linux │
                      │ /dev/sda3      14682112 16777215  2095104 1023M 83 Linux │
                      │                                        │
                      │              < EXIT >                  │
                      └────────────────────────────────────────┘
```
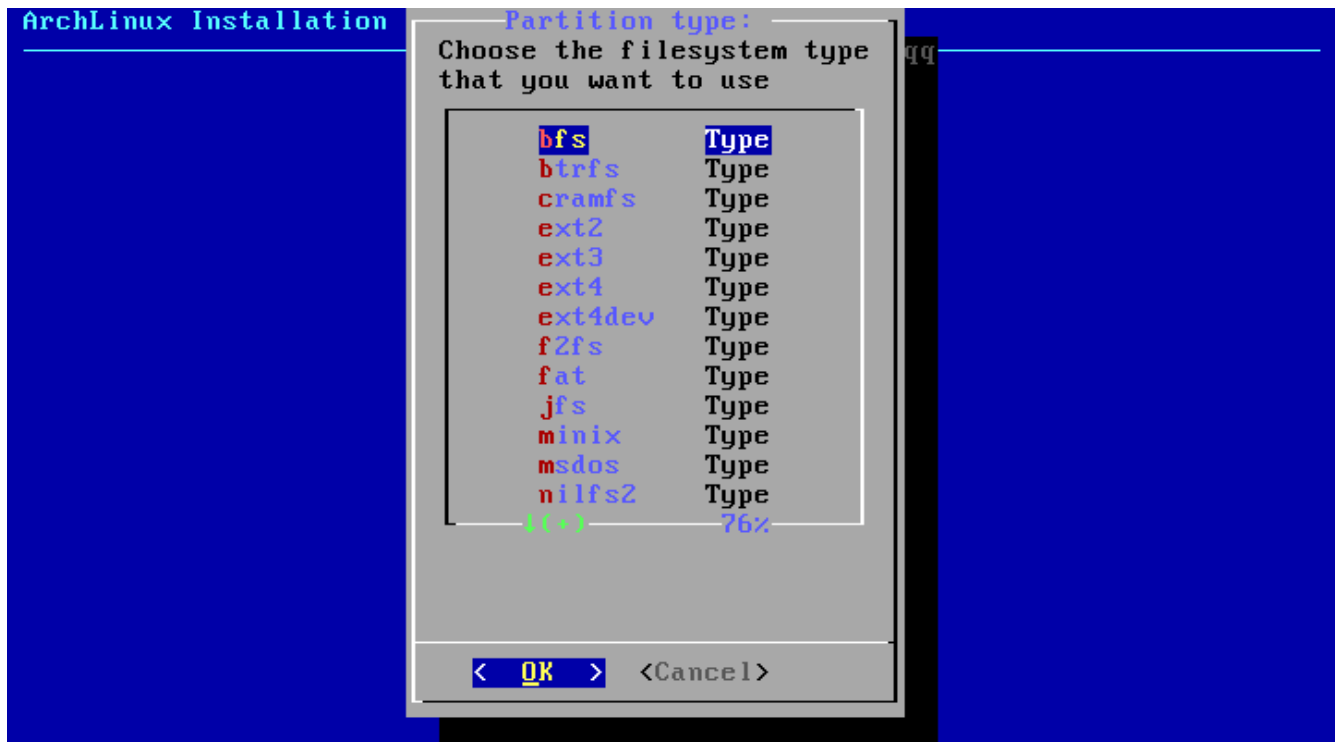
Now select the partition for the system folder.

```
ArchLinux Installation

              ┌──────Partition selection:──────┐
              │ Choose the partition that      │
              │ you want to use for: home      │
              │  ┌──────────────────────────┐  │
              │  │ /dev/sda2   2G           │  │
              │  │ /dev/sda3   1023M        │  │
              │  │                          │  │
              │  └──────────────────────────┘  │
              │                                │
              │   <   OK   >   <Cancel>        │
              └────────────────────────────────┘
```
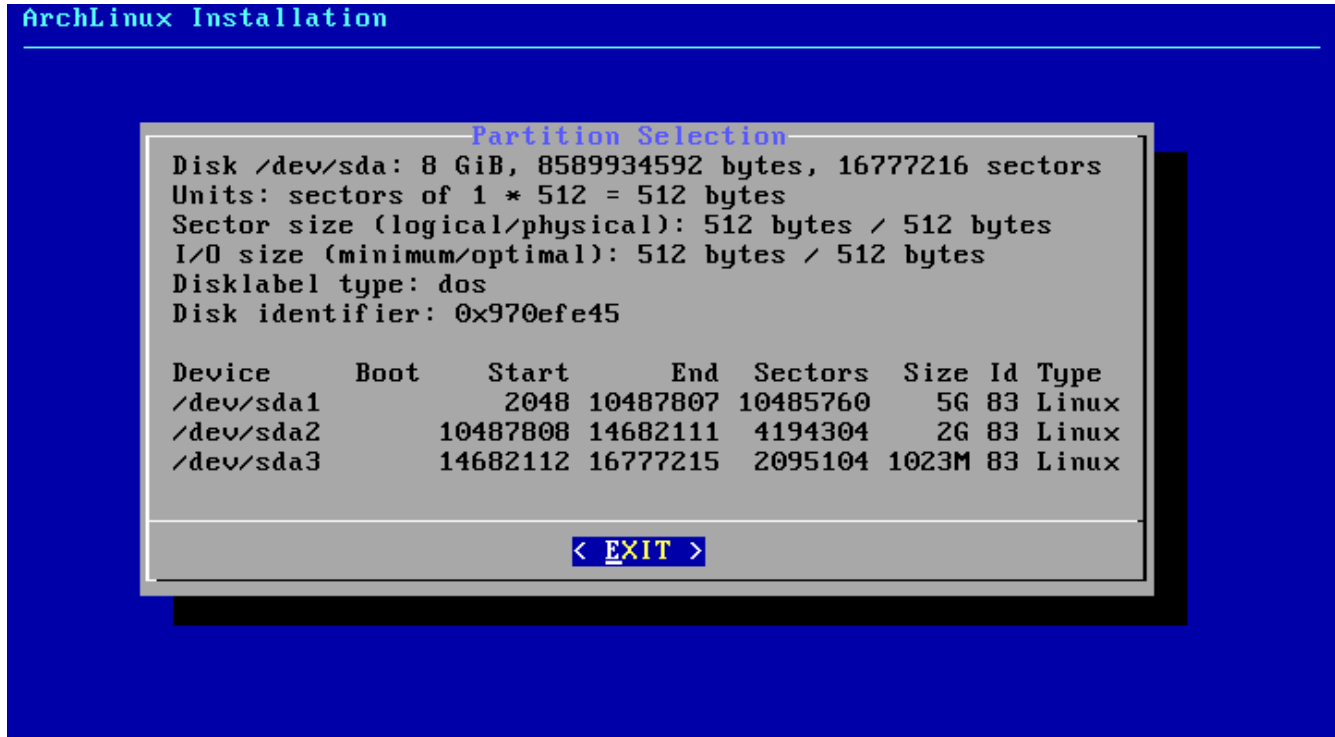
Select the filesystem of the partition.

```
ArchLinux Installation        Partition type:
                         Choose the filesystem type    qq
                         that you want to use

                             bfs           Type
                             btrfs         Type
                             cramfs        Type
                             ext2          Type
                             ext3          Type
                             ext4          Type
                             ext4dev       Type
                             f2fs          Type
                             fat           Type
                             jfs           Type
                             minix         Type
                             msdos         Type
                             nilfs2        Type
                         ↓(+)              76%


                          <  OK  >   <Cancel>
```

If you have selected a folder to be mounted you will see the partitions available.

```
ArchLinux Installation


                         Partition Selection
          Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors
          Units: sectors of 1 * 512 = 512 bytes
          Sector size (logical/physical): 512 bytes / 512 bytes
          I/O size (minimum/optimal): 512 bytes / 512 bytes
          Disklabel type: dos
          Disk identifier: 0x970efe45

          Device      Boot     Start       End  Sectors   Size Id Type
          /dev/sda1            2048  10487807 10485760    5G 83 Linux
          /dev/sda2        10487808 14682111  4194304     2G 83 Linux
          /dev/sda3        14682112 16777215  2095104  1023M 83 Linux


                           < EXIT >
```

Now select the partition for the system folder.

Select the filesystem of the partition.
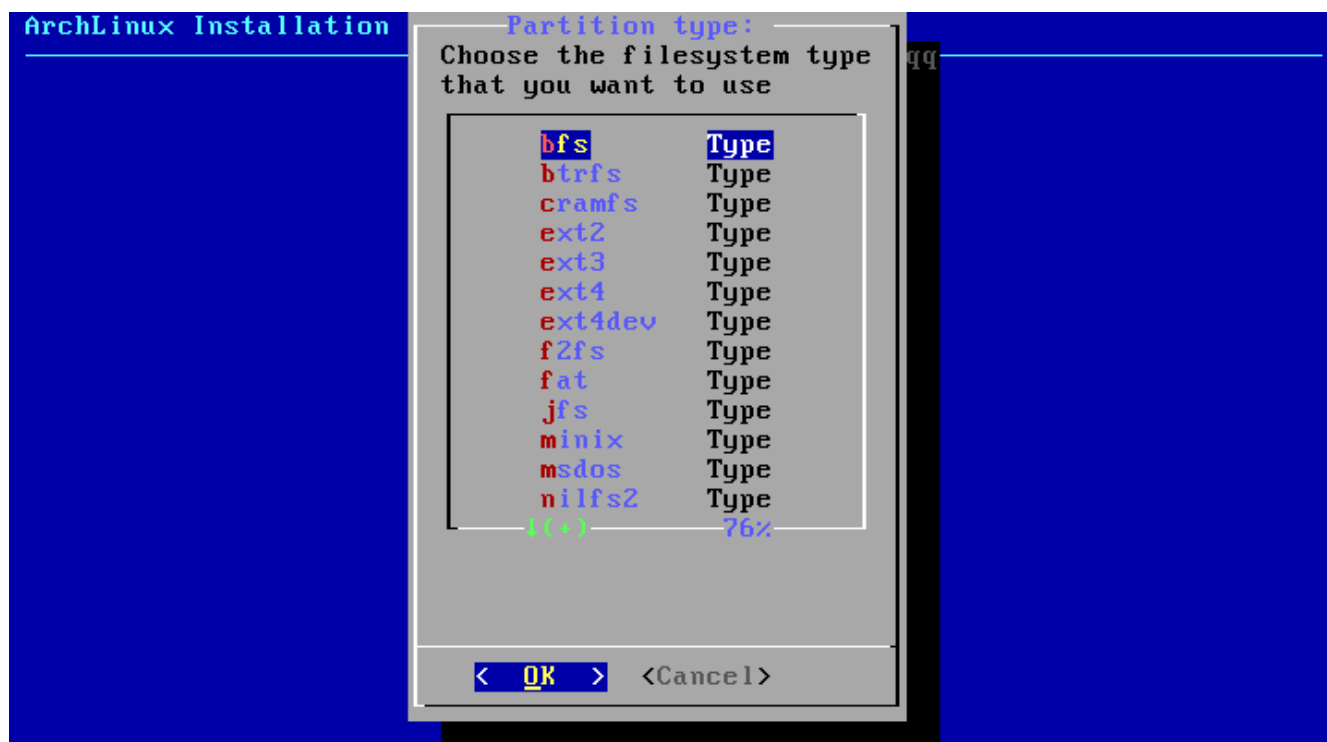
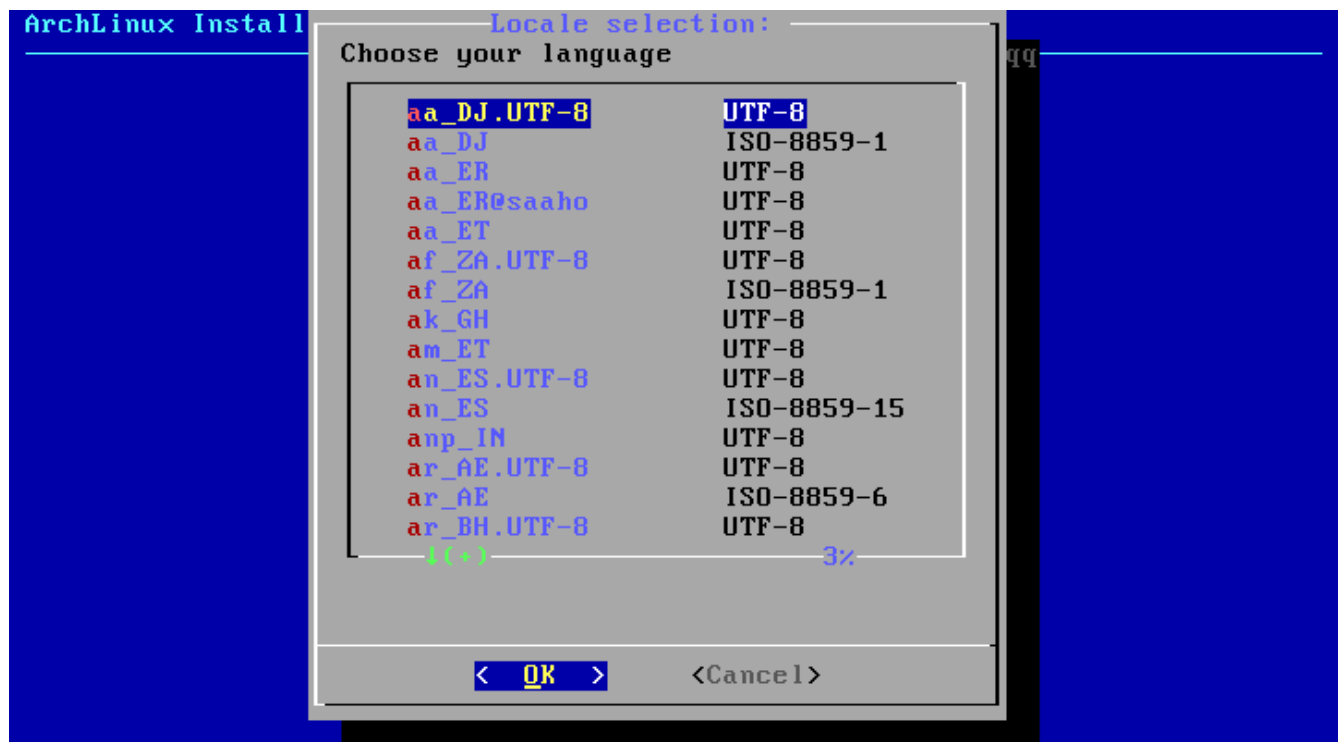Now is time to install Arch Linux, depend of your internet connection it will take a while, just be patient.

After install the base of Arch Linux set the locale of the machine.

```
ArchLinux Installation
```

```
       Locale selection:
   Choose your language

      es_ES.UTF-8    UTF-8


      <  OK  >   <Cancel>
```
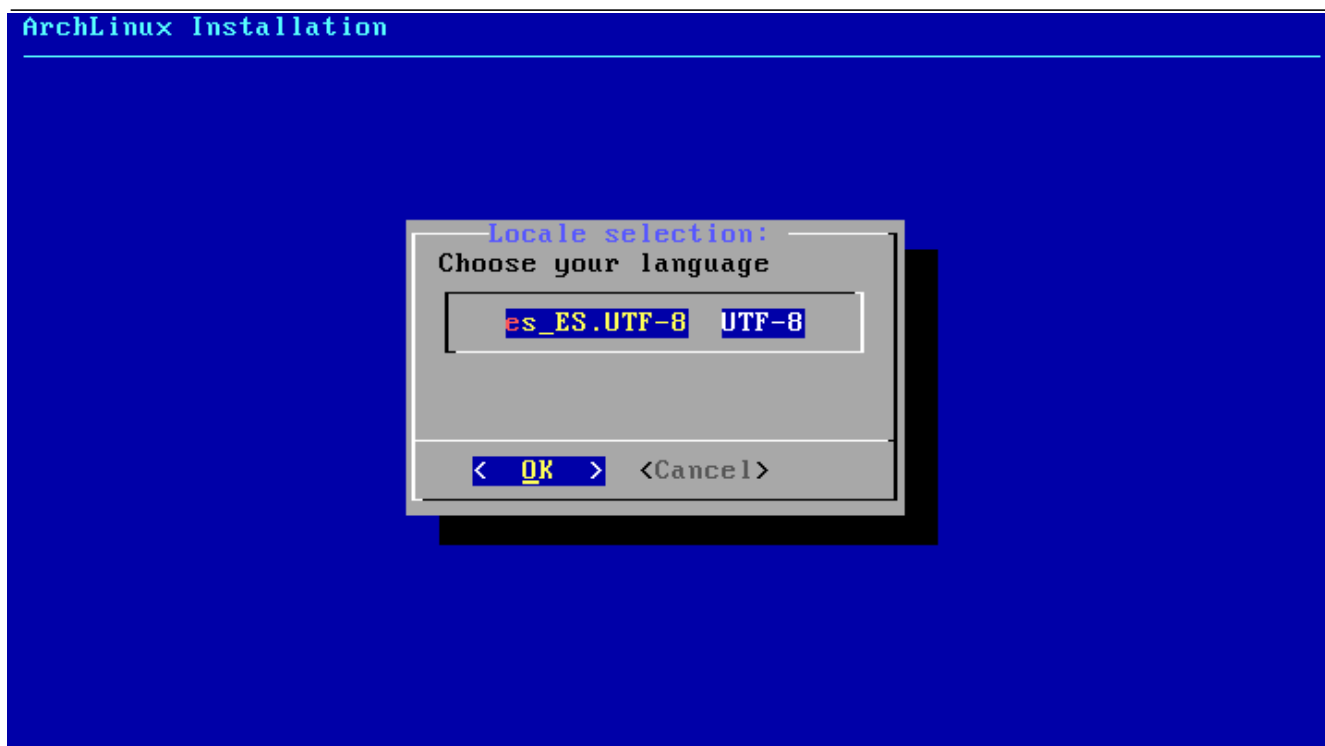
Now select your time zone

```
ArchLinux Installation      Timezone selection:
                         Choose your timezone        qq

              America/        Time
              Antarctica/     Time
              Arctic/         Time
              Asia/           Time
              Atlantic/       Time
              Australia/      Time
              Brazil/         Time
              Canada/         Time
              Chile/          Time
              Etc/            Time
              Europe/         Time
              Indian/         Time
              Mexico/         Time
              Pacific/        Time
              posix/          Time
              (+)             24%


              <  OK  >   <Cancel>
```
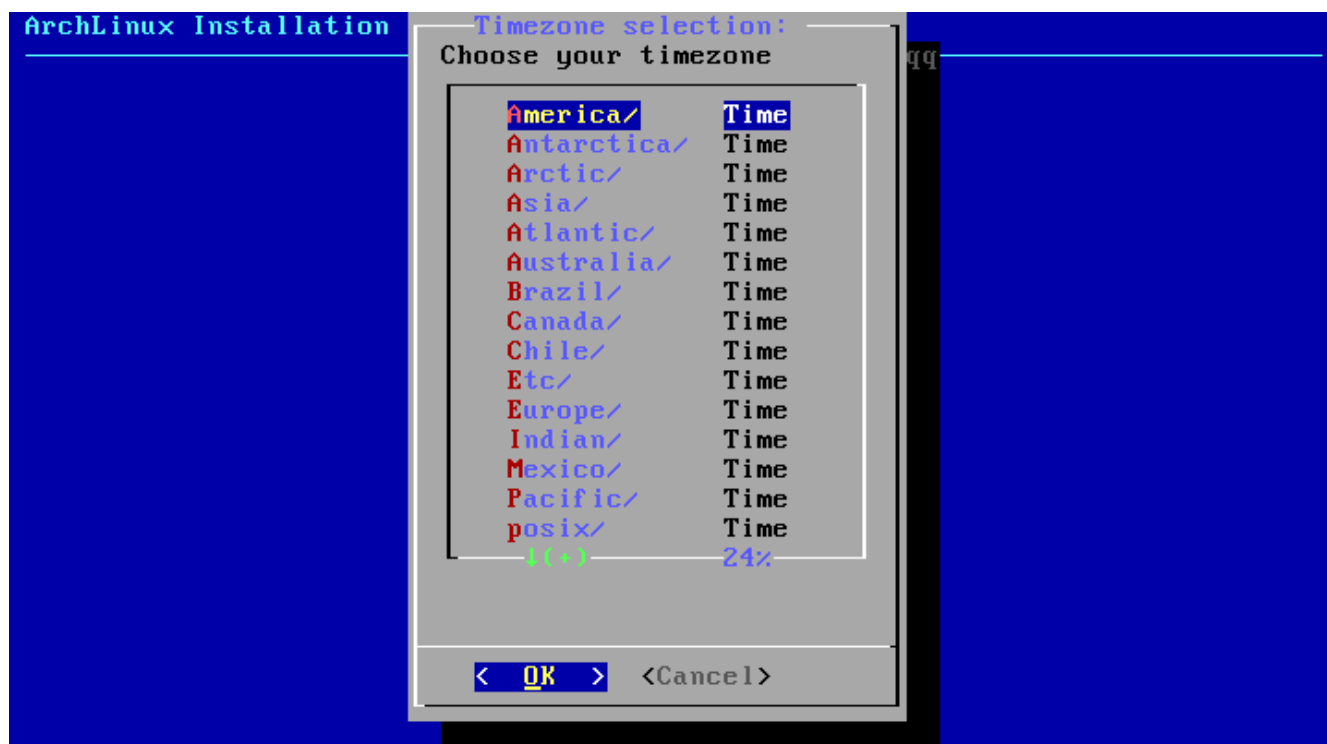
Enter the name of the machine.
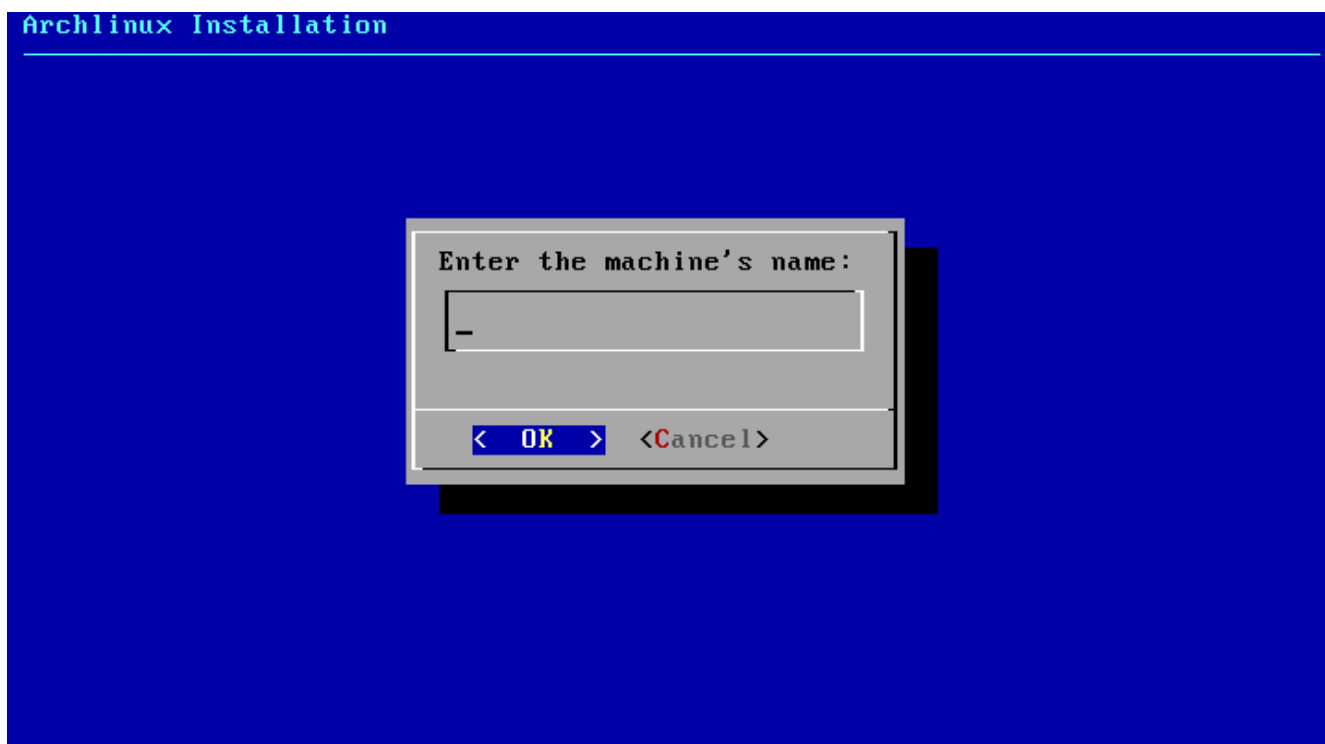
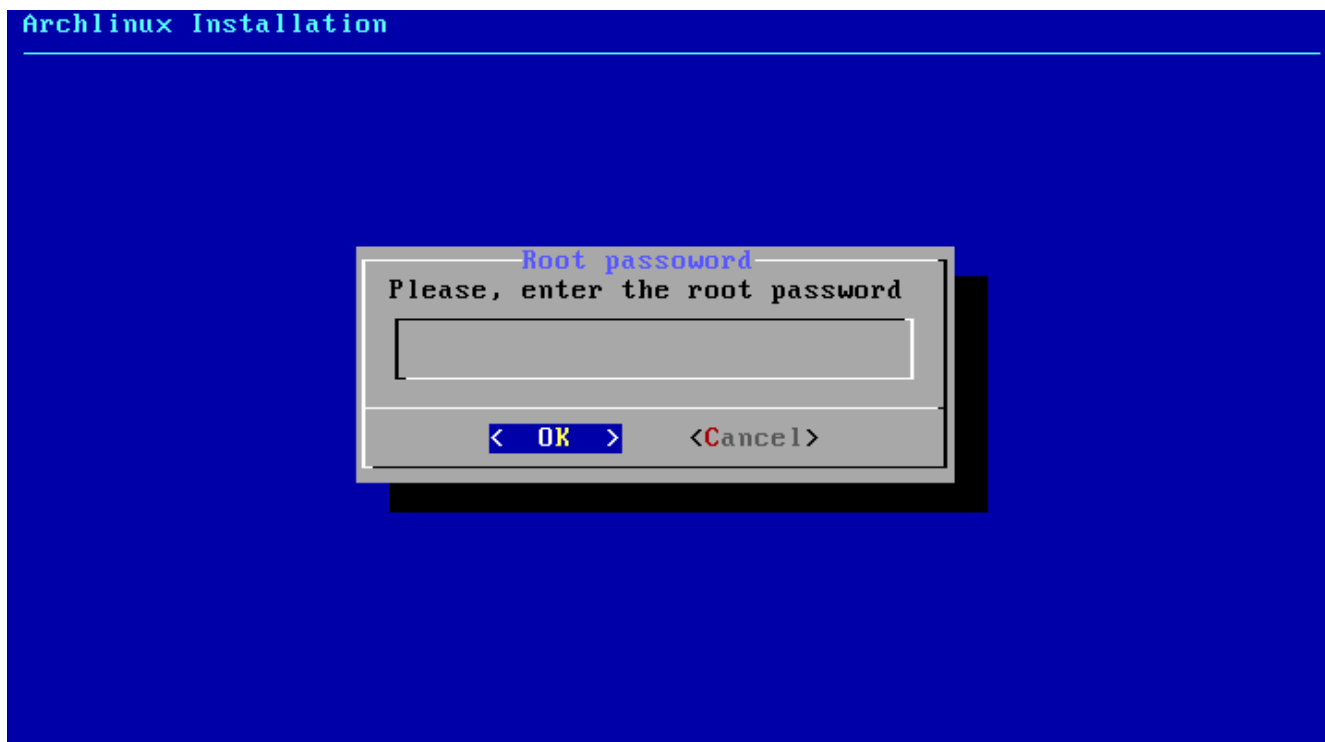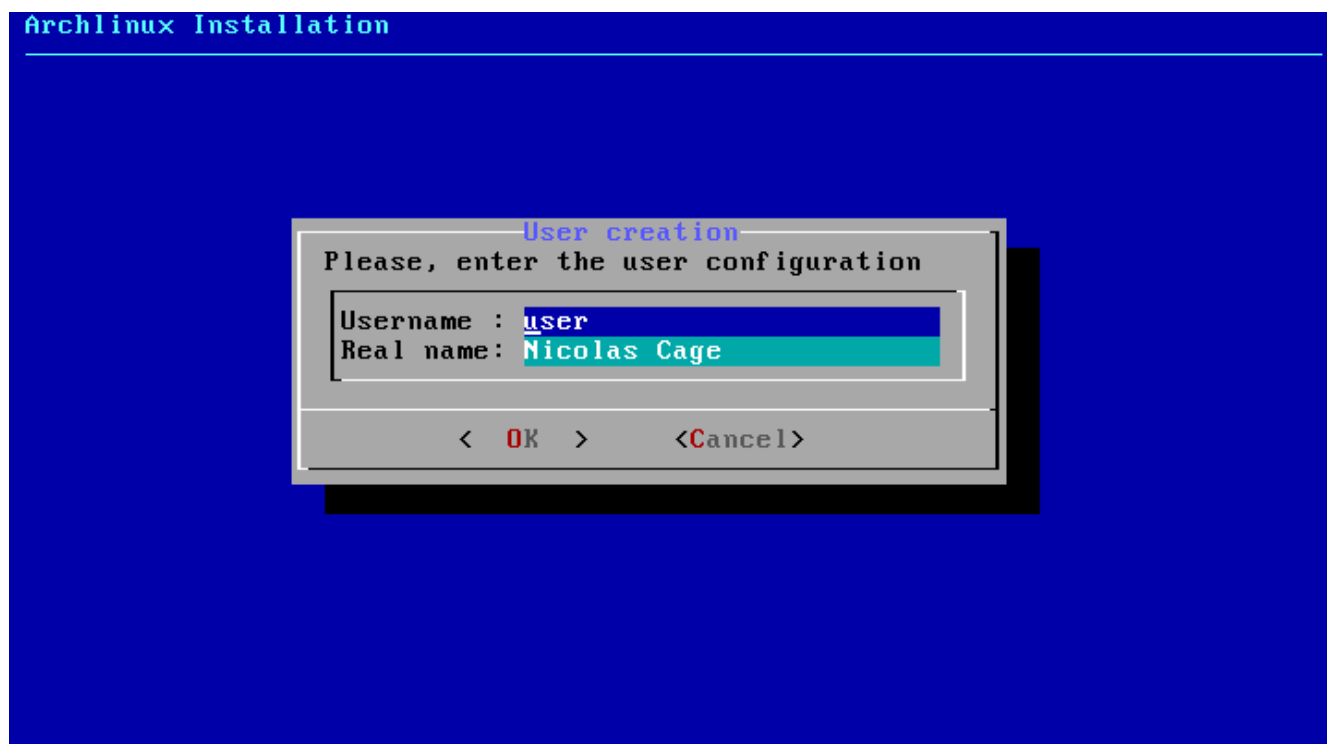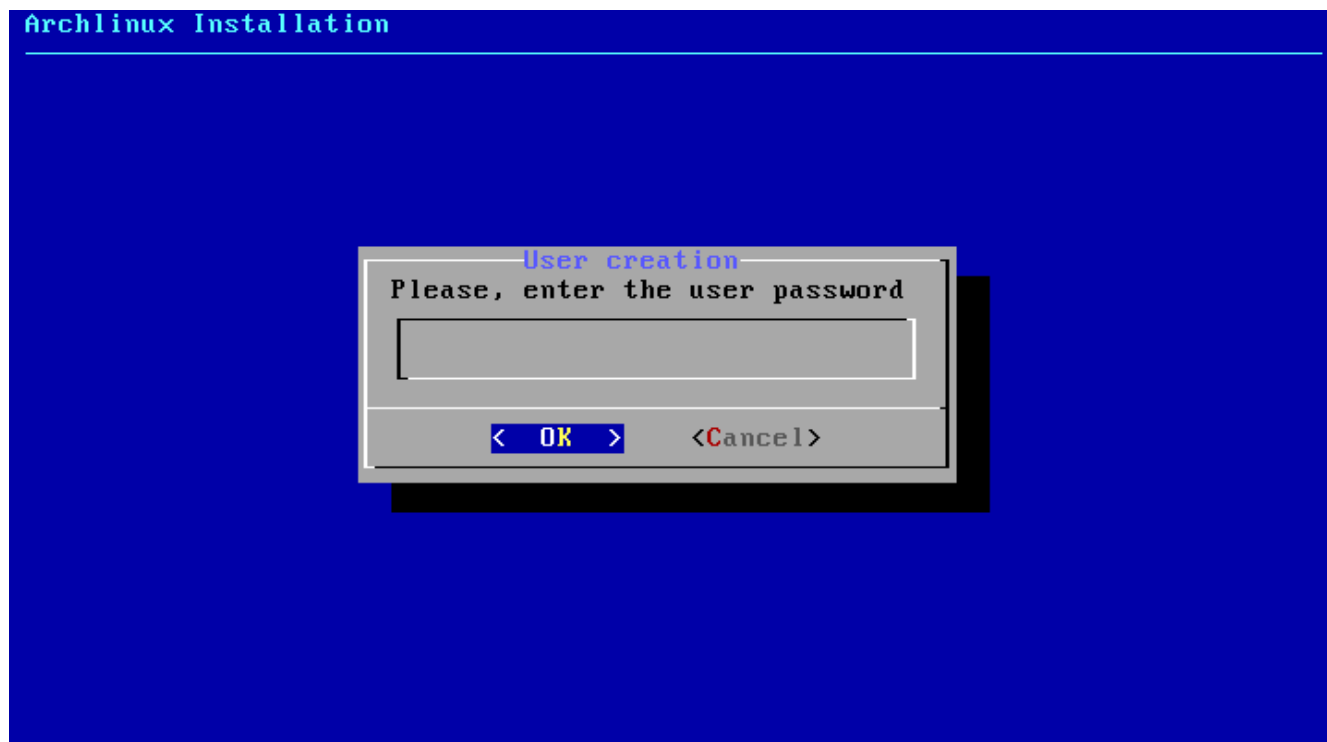Configure the root password (for more security)

Write the username and your real name or any nickname.

Now write the password for the user.

Install the grub if you need it.

```
ArchLinux Installation
_____

                    ┌─────Grub instalation─────┐
                    │ Do you want to install grub? │
                    │                              │
                    │   < Yes >     < No  >        │
                    └──────────────────────────────┘
```
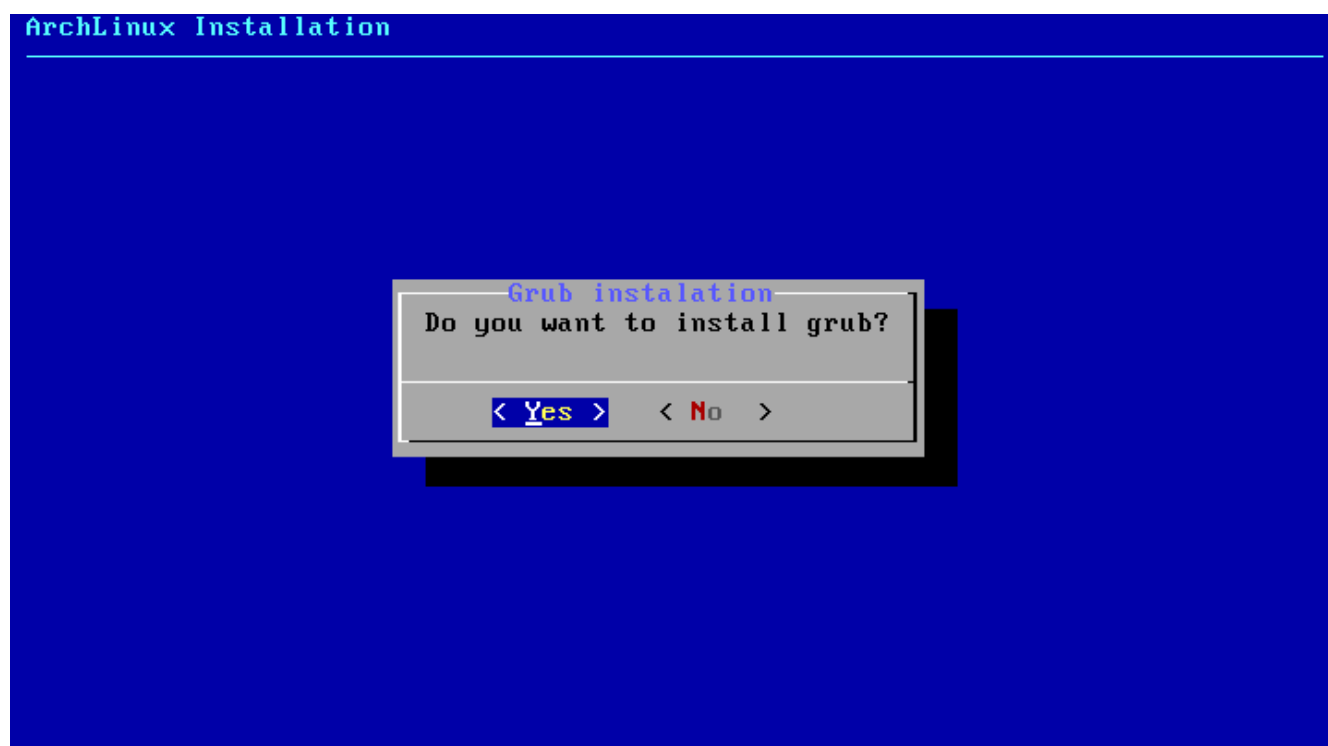
Select where grub will install.

```
ArchLinux Installation
_____

          ┌─Grub partition/disk selection:─┐
          │ Choose the disk/partition to   │
          │ install grub in it (The disk   │
          │ that contains base system is   │
          │ /dev/sda):                     │
          │ ┌────────────────────────────┐ │
          │ │   /dev/sda    Disk         │ │
          │ │   /dev/sda1   5G           │ │
          │ │   /dev/sda2   2G           │ │
          │ │   /dev/sda3   1023M        │ │
          │ └────────────────────────────┘ │
          │                                │
          │   <  OK  >     <Cancel>        │
          └────────────────────────────────┘
```
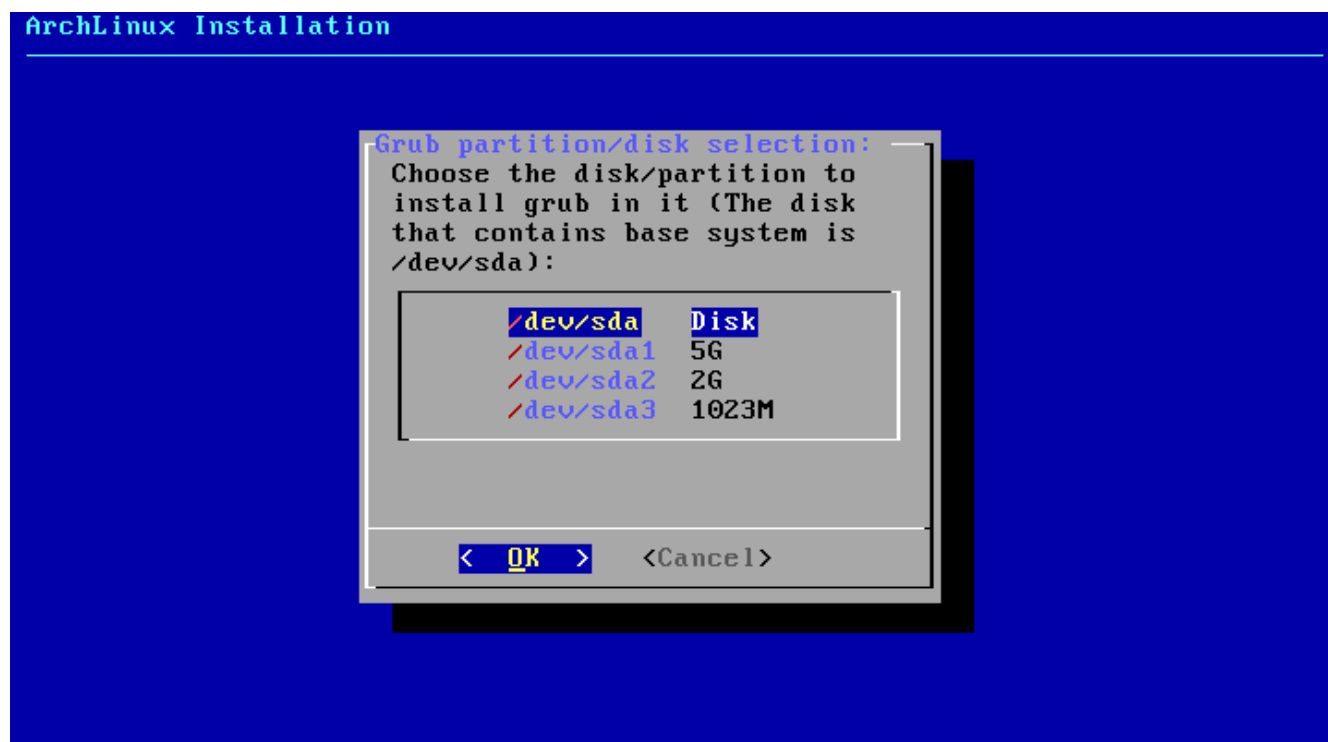
The installation is done! The system will reboot.

5.0 POST INSTALLATION

After reboot you don't need to do anything, the script will boot automatically.

The first menu will ask if you want install a desktop Environment.
If you say "No" Arch Linux will work in text mode (terminal).
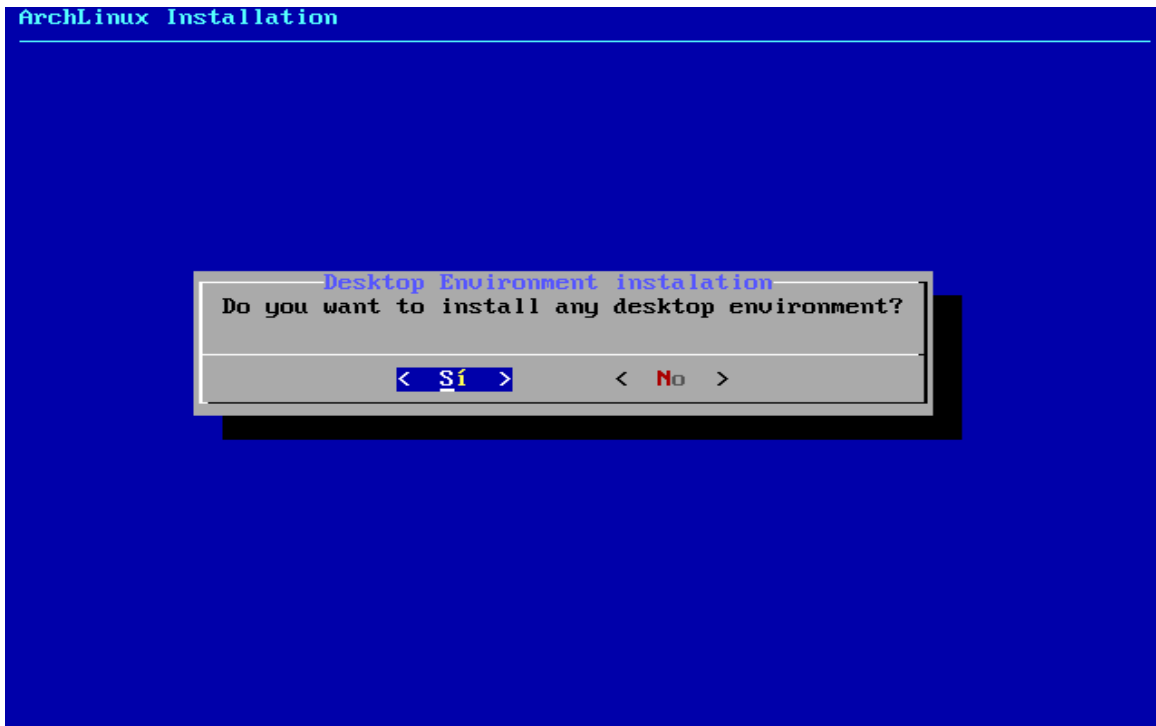
There are some problems between desktop environments (conflict between packages, conflict between dependencies...)
As you can see, the following desktops have incompatibilities.

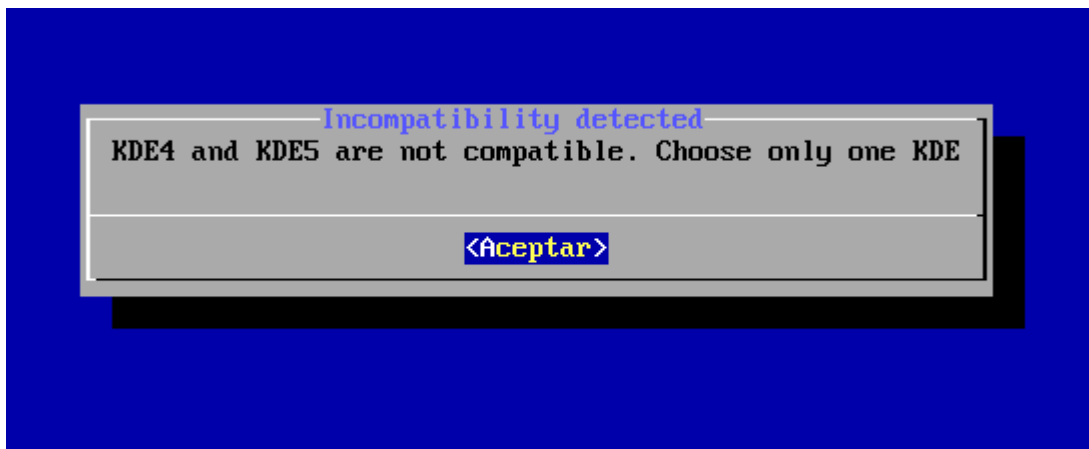Here is a list of the entire Desktop environment we select. Select many as you want:


```
ArchLinux Installation

    Select the Desktop Environment:

       [ ] KDE4          KDE desktop environment v4
       [ ] KDE5          KDE desktop environment v5
       [ ] Gnome         GNOME Desktop environment
       [ ] XFCE          XFCE desktop environment
       [ ] LXDE          Light Desktop environment
       [ ] MATE          A mantained fork of GNOME v2
       [ ] Pantheon      Elementary OS' Desktop environment
       [ ] LXQT          Light Desktop environment with QT
       [ ] Unity         Ubuntu's Desktop environment
       [ ] DDE           Deepin's Desktop environment
       [ ] OpenBox       Simple and minimalistic DE
       [ ] i3            Tiled Window manager
       [ ] Cinnamon      Linux Mint's desktop environment
       [ ] Budgie        Solus' desktop environment
       [ ] Enlightenment Enlightenment desktop environment


              <Aceptar >        <Cancelar>
```

If you choose desktops that cause conflict, the installer will warn you!


```
            Incompatibility detected
    KDE4 and KDE5 are not compatible. Choose only one KDE

                    <Aceptar>
```

After install a desktop environment, you need a display manager, depend of which desktop you installed, it doesn't come with a display manager.
We provide a list with some display manager to solve this problem.

```
ArchLinux Installation


                     Display Manager selection:
         Select the Display Manager:

             GDM        GNOME Display manager
             SDDM       KDE4 Display manager
             LXDM       LXDE Display manager
             MDM        Linux Mint's Display manager
             Entrance   Enlightenment's Display manager (Experimental)
             LightDM    Cross-desktop display manager



                      <Aceptar >        <Cancelar>
```
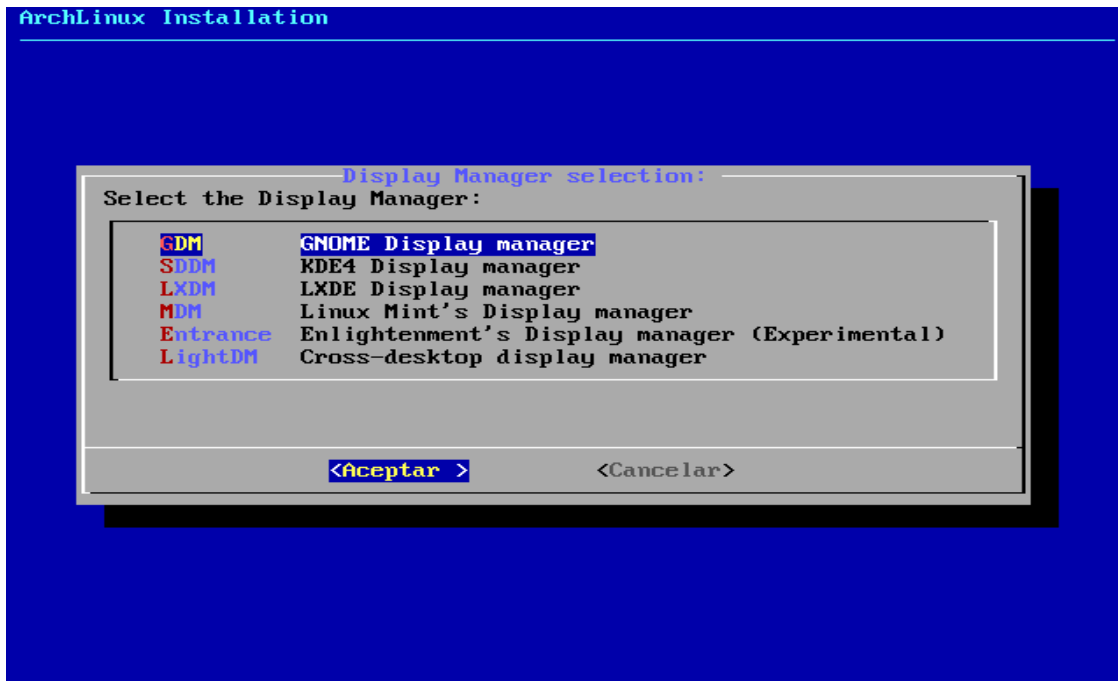
If you want change the shell, we provide a list with that purpose.

```
ArchLinux Installation



                   Default Shell selection:
            Select the Default Shell:

                BASH     Default Shell
                SH       SH Shell
                ZSH      ZSH Shell
                FISH     FISH Shell
                CShell   C Shell
                DASH     DASH Shell



                  <Aceptar >  <Cancelar>
```
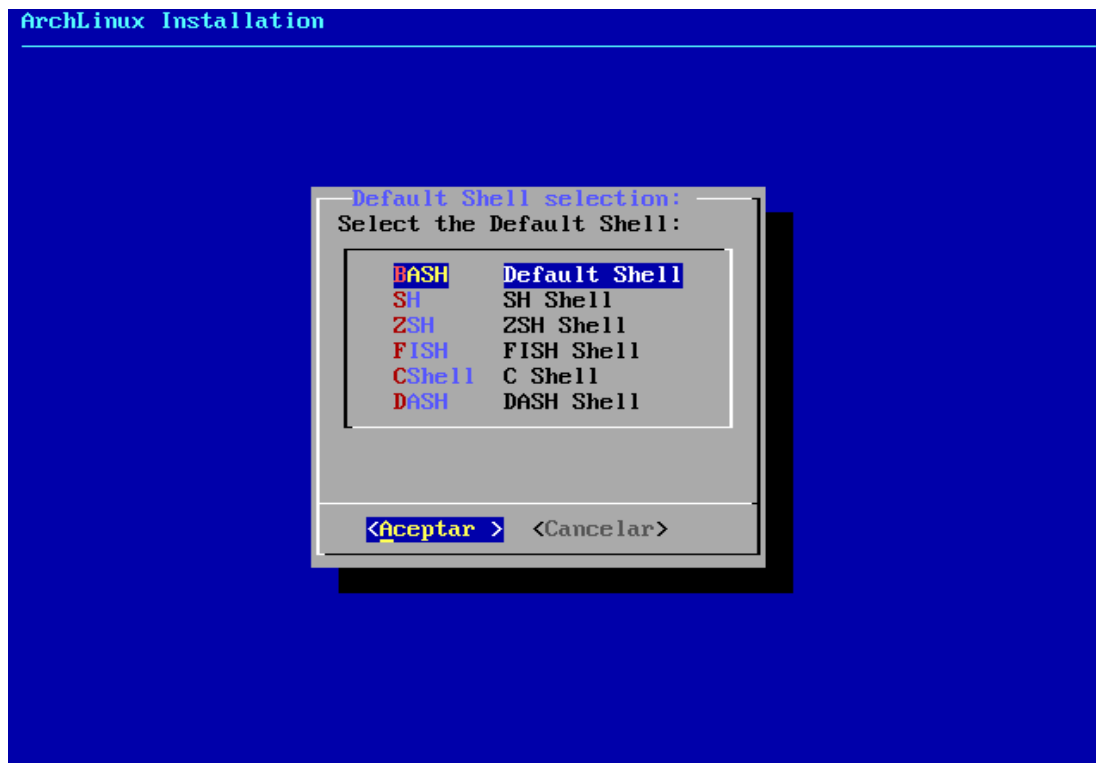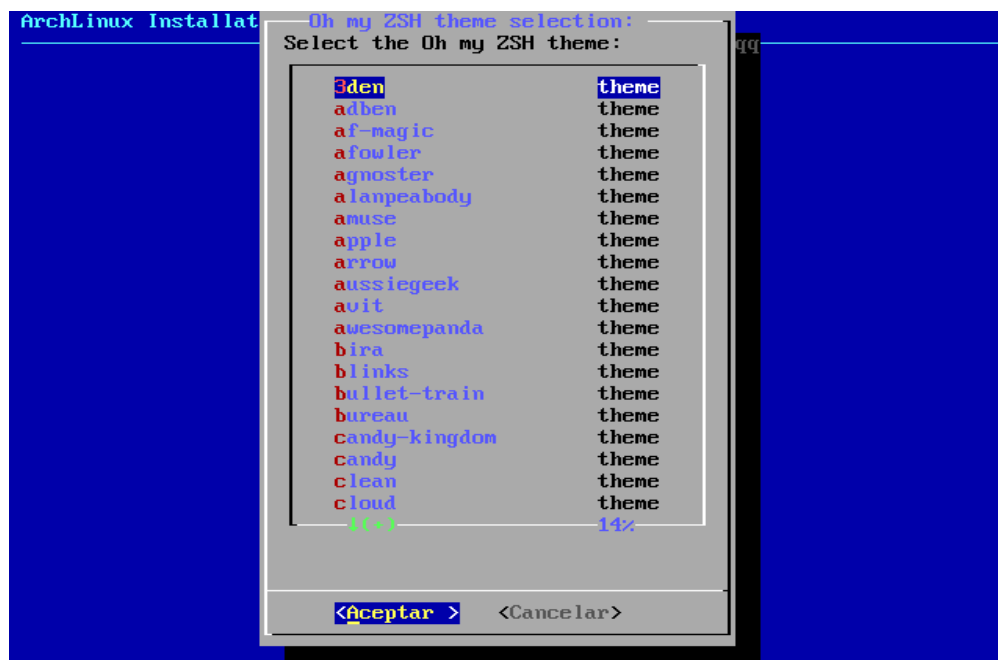
ZSH have two more options
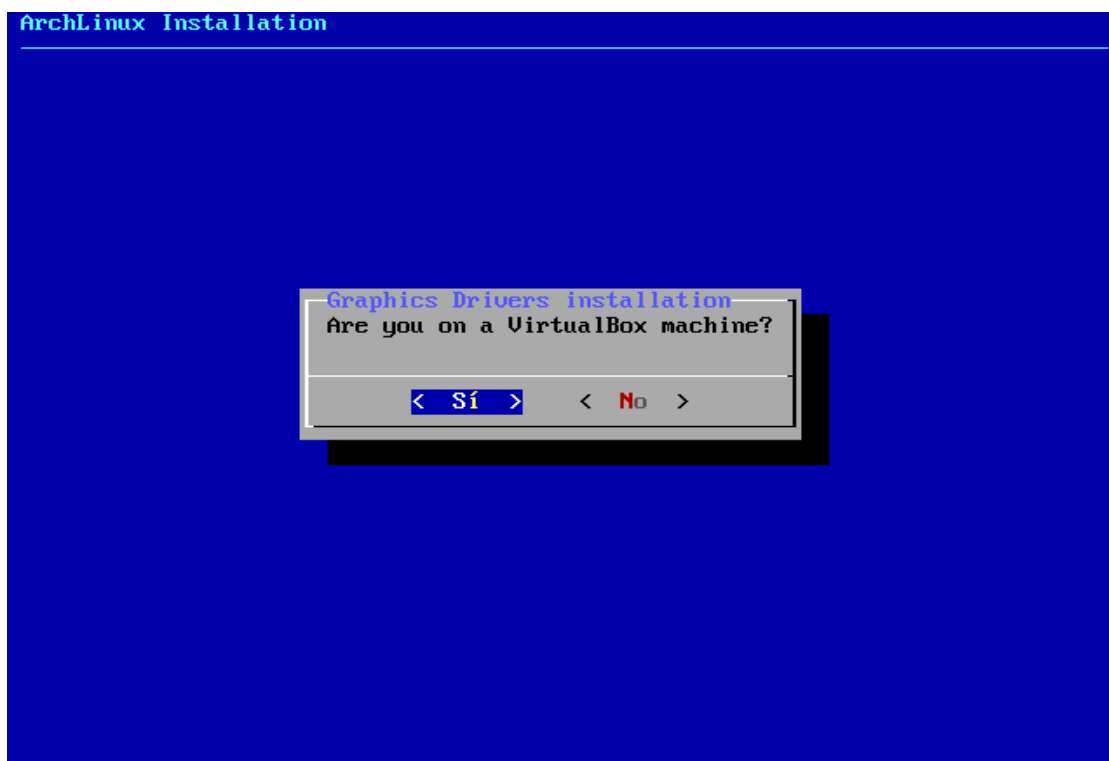*grml: Is a default configuration with colors and alias.*
*Oh my ZSH: The same as GRML but has more themes.*
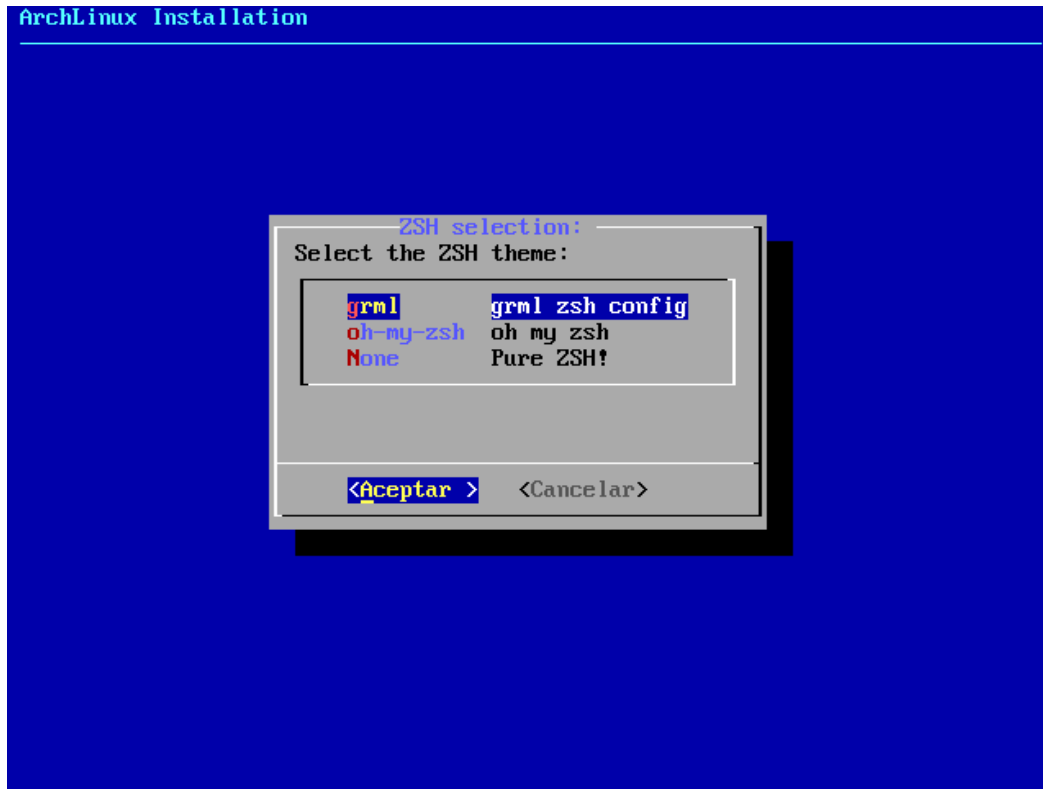
If you select *Oh my ZSH* you select which theme do you want use.

For the graphics drivers you only have to answer a question.

```
ArchLinux Installation
─────────────────────────────────────────────────────




                    ┌─Graphics Drivers installation─┐
                    │ Are you on a VirtualBox machine?│
                    │                                 │
                    │   < Sí >       <  No  >         │
                    └─────────────────────────────────┘
```

A menu will ask if you want to install any server.

```
ArchLinux Installation
─────────────────────────────────────────────────────




                    ┌────Services instalation────┐
                    │ Do you want to install any service? Ex: SSH│
                    │                             │
                    │    < Sí >      <  No  >     │
                    └─────────────────────────────┘
```
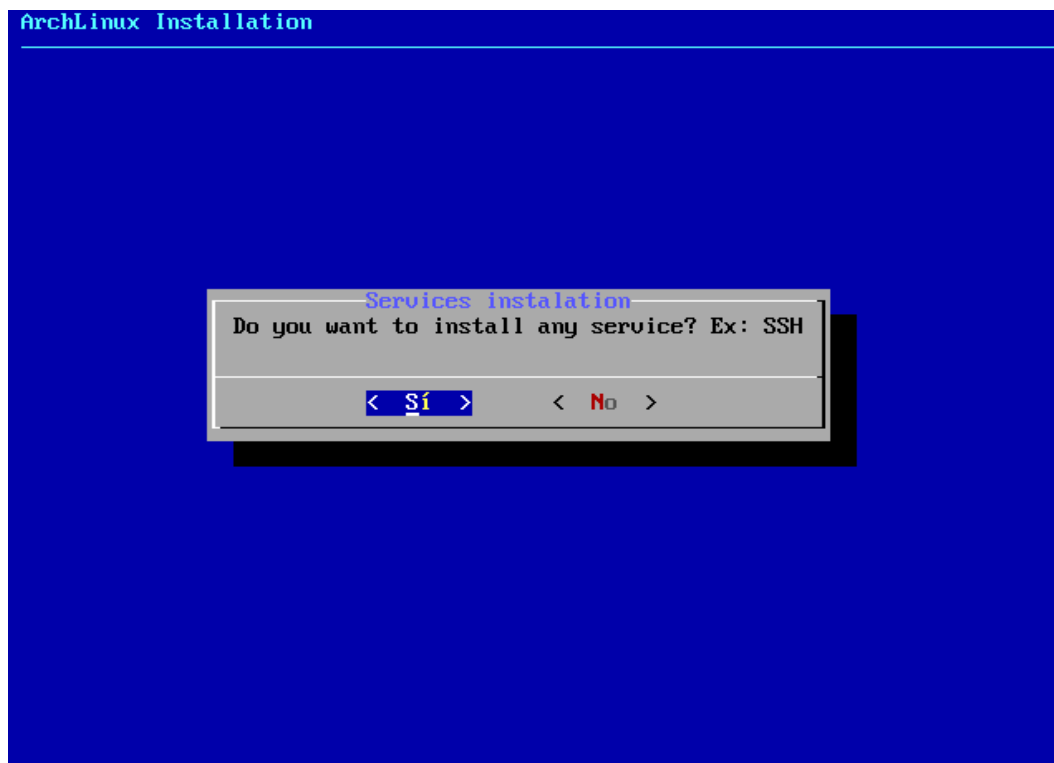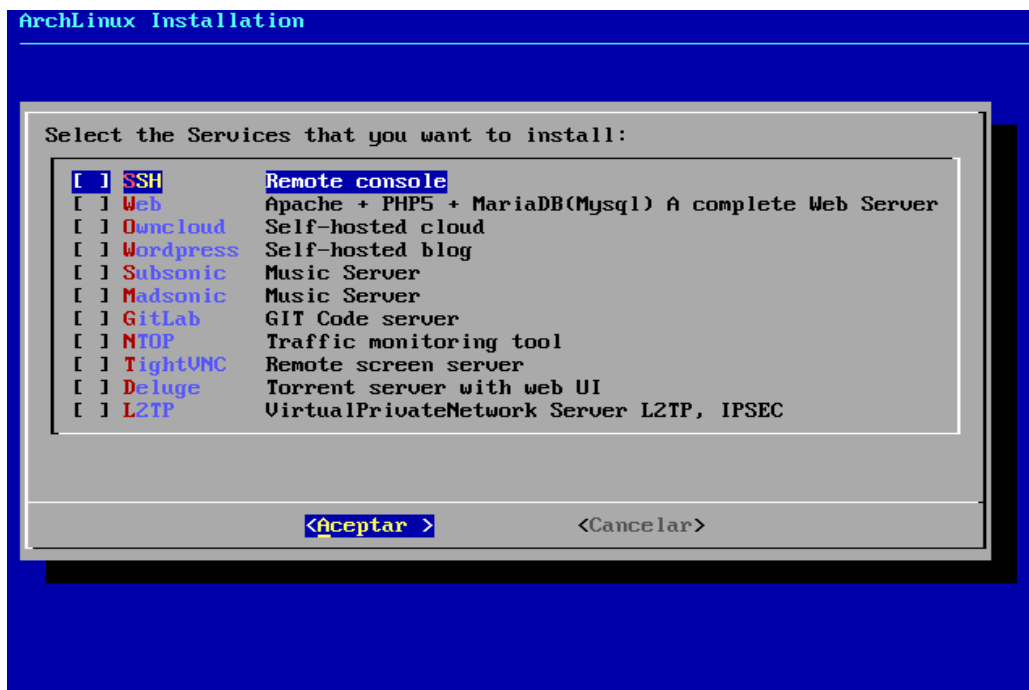
There are some problems between some servers (conflict between packages, conflict between dependencies...)
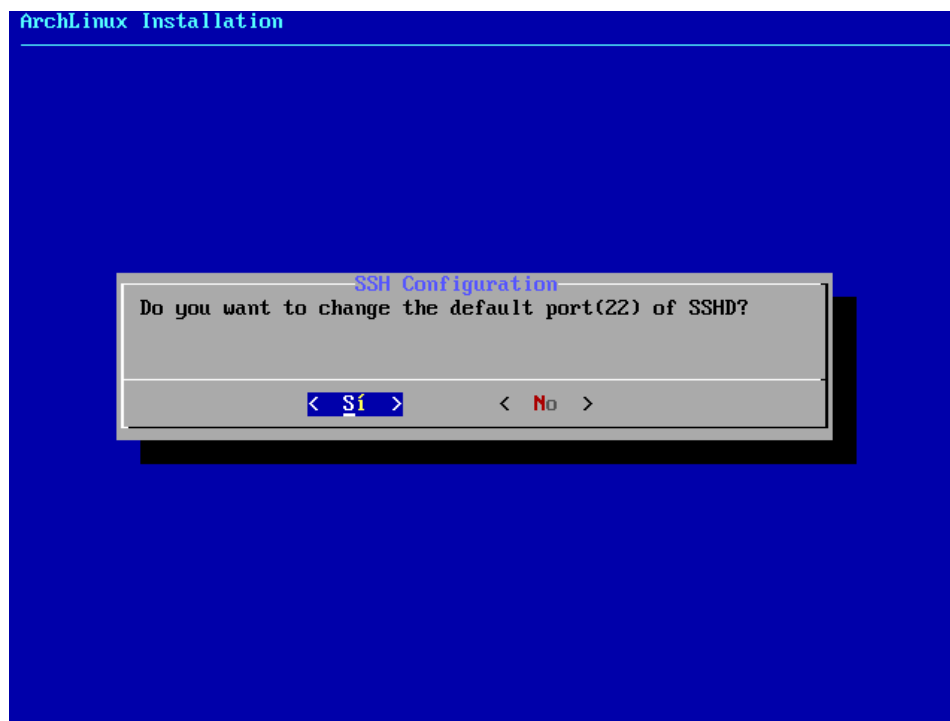As you can see, the following servers have incompatibilities.

```
ArchLinux Installation
_____




                          ┌──────Be careful──────┐
                          │ These are the some incompatibilities
                          │ between servers
                          │      Subsonic ── Madsonic
                          ├──────────────────────┤
                          │       <Aceptar>      │
                          └──────────────────────┘
```
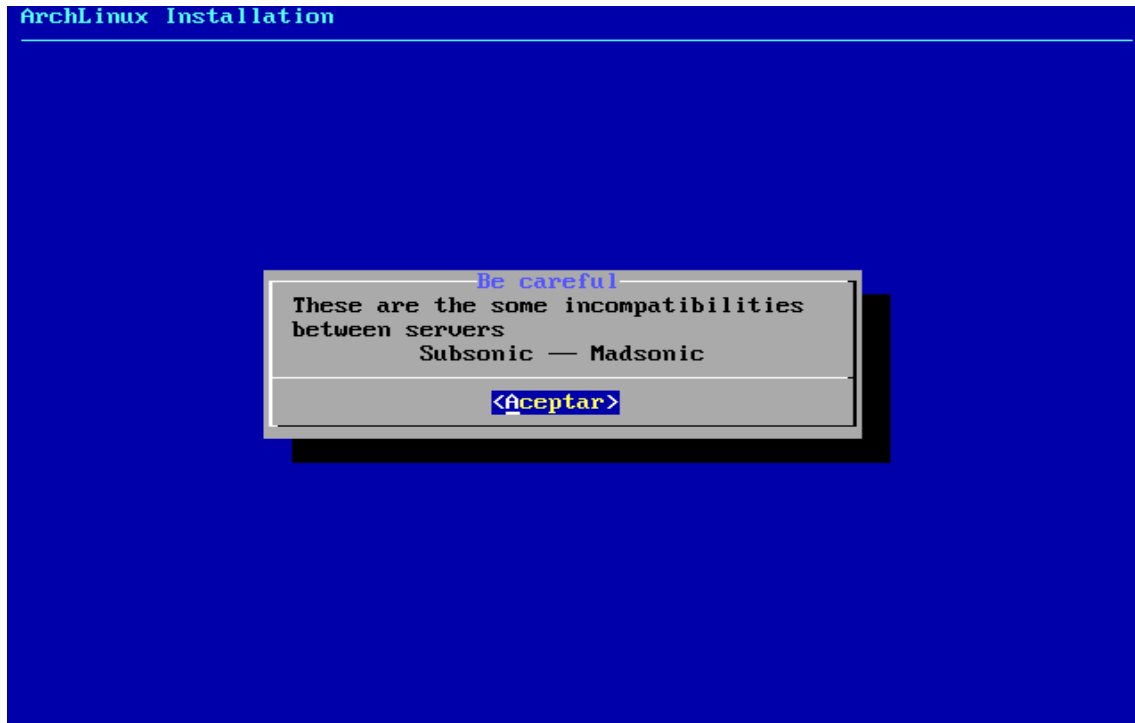
Here is a list of the entire servers we select. Select many as you want:

```
ArchLinux Installation
_____



    Select the Services that you want to install:

       [ ] SSH          Remote console
       [ ] Web          Apache + PHP5 + MariaDB(Mysql) A complete Web Server
       [ ] Owncloud     Self-hosted cloud
       [ ] Wordpress    Self-hosted blog
       [ ] Subsonic     Music Server
       [ ] Madsonic     Music Server
       [ ] GitLab       GIT Code server
       [ ] NTOP         Traffic monitoring tool
       [ ] TightVNC     Remote screen server
       [ ] Deluge       Torrent server with web UI
       [ ] L2TP         VirtualPrivateNetwork Server L2TP, IPSEC




             <Aceptar >              <Cancelar>
```

SSH

You can change the default port of SSH:

```
ArchLinux Installation

            ┌──────────SSH Configuration──────────┐
            │ Do you want to change the default port(22) of SSHD? │
            │                                      │
            │    < Sí >            <  No  >        │
            └──────────────────────────────────────┘
```

Just write which port you want to use for SSH.

```
Archlinux Installation

            ┌──────────SSH Configuration──────────┐
            │ Enter the port that you want to use: │
            │ ┌──────────────────────────────────┐ │
            │ │                                  │ │
            │ └──────────────────────────────────┘ │
            │     <Aceptar >     <Cancelar>        │
            └──────────────────────────────────────┘
```
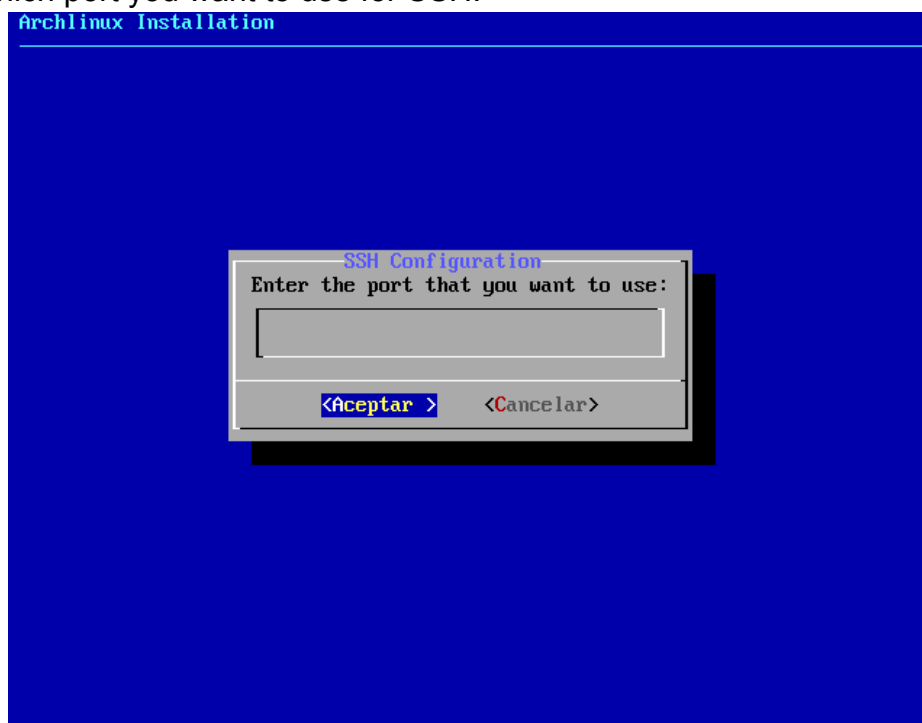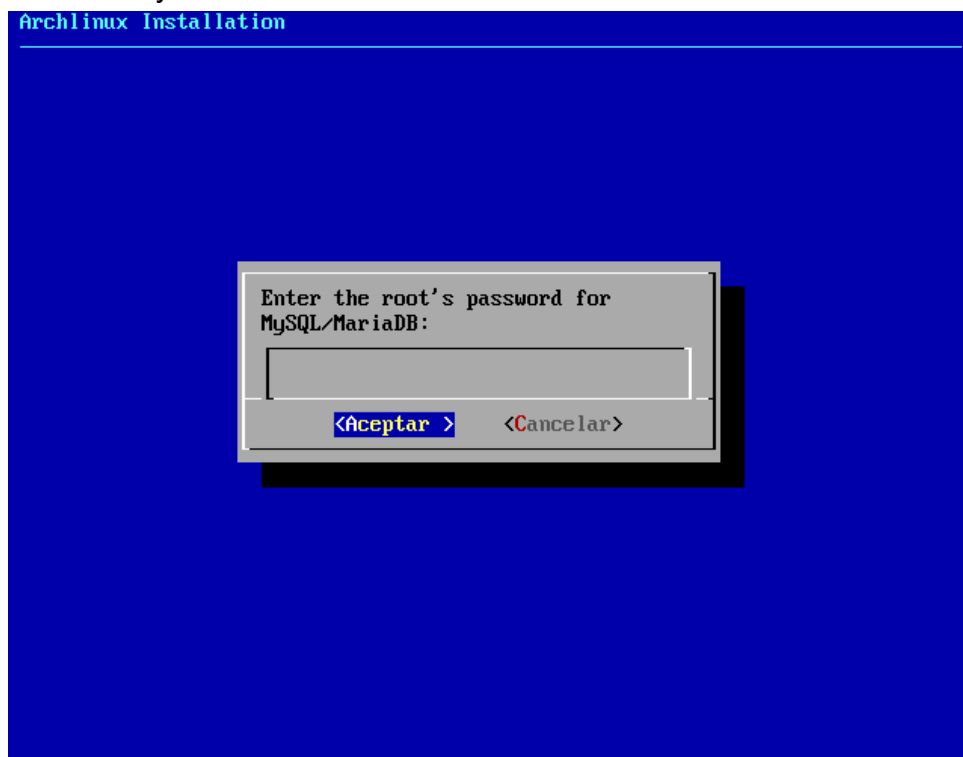
Finished the installation of SSH a menu will tell you the IP of the machine and the port:
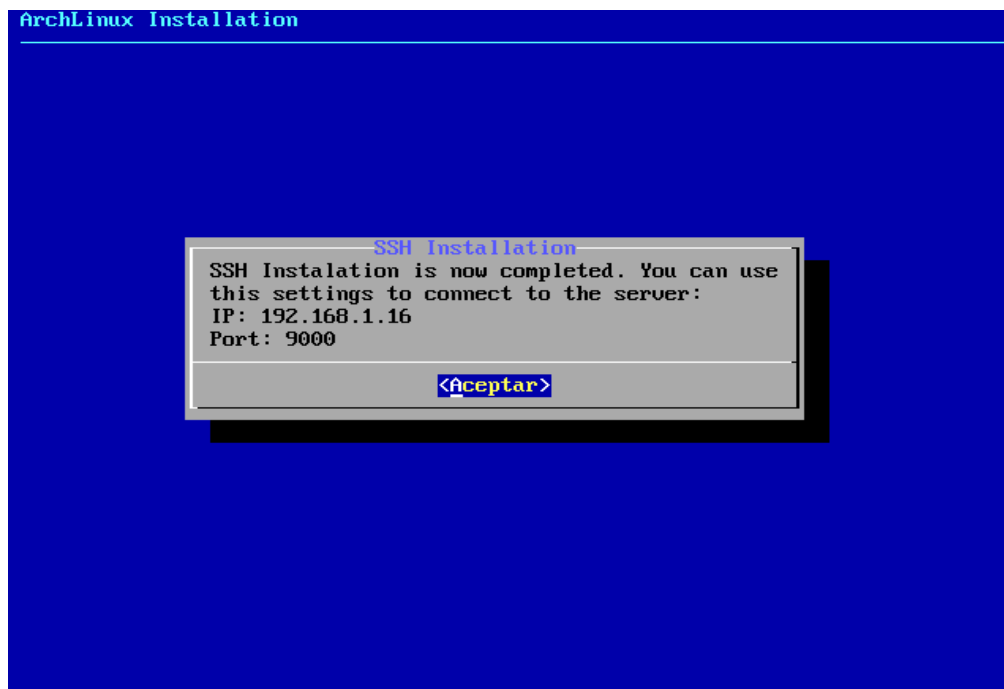
Web

Set the password for MySQL/MariaDB

```
Archlinux Installation
```

```
Enter the root's password for
MySQL/MariaDB:

[                              ]

        <Aceptar >      <Cancelar>
```
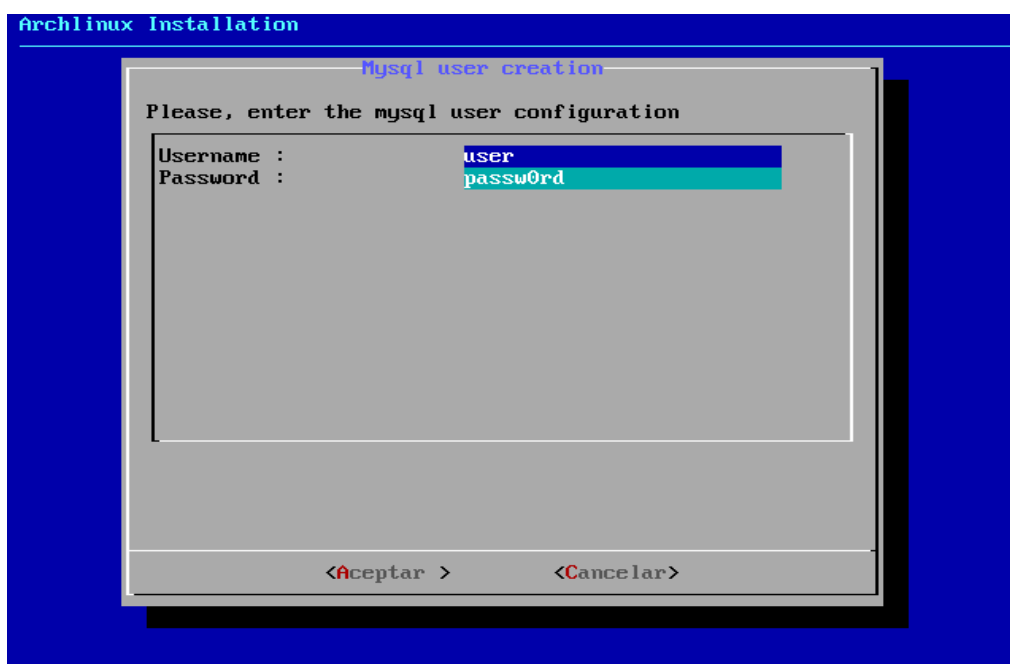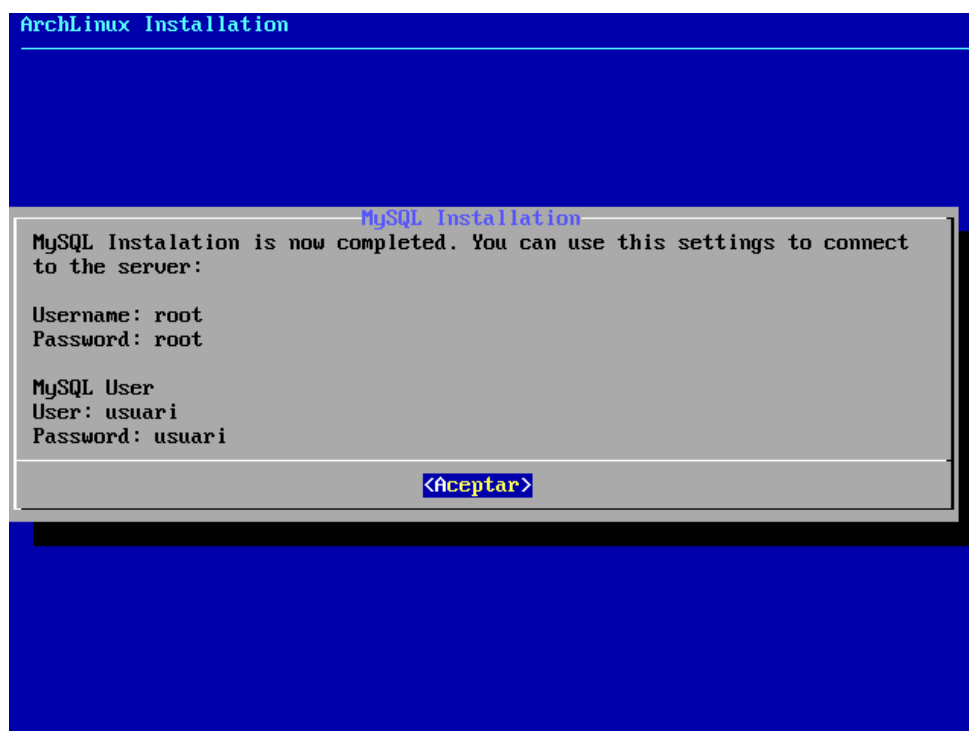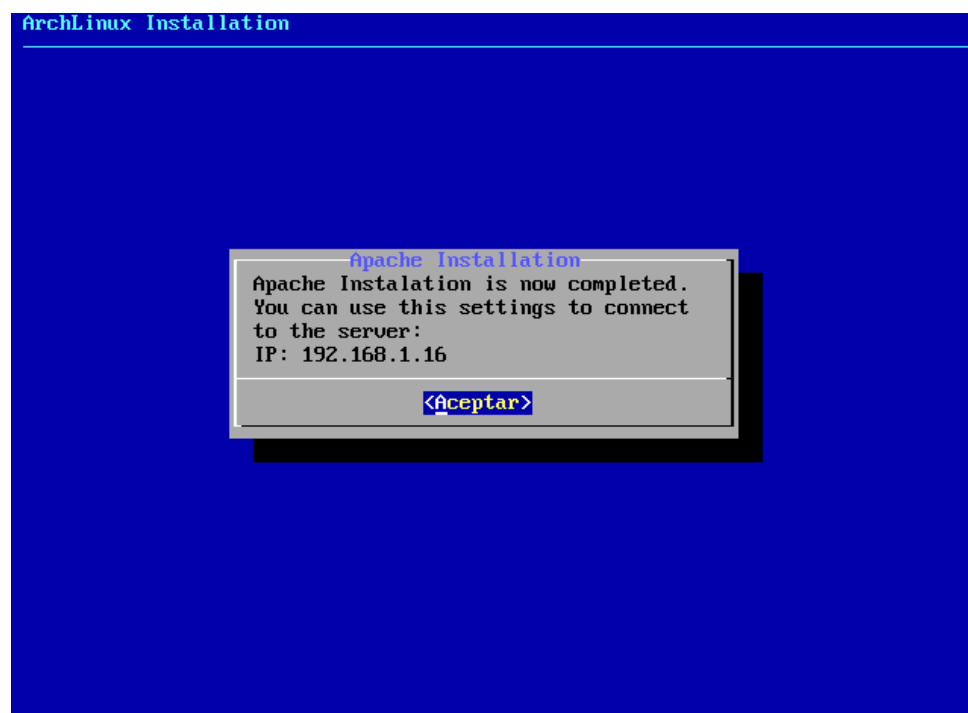
Create the username and his password for MySQL (**Note: the password is not in a safe box people around you will see it**)

```
Archlinux Installation

                    Mysql user creation

  Please, enter the mysql user configuration

  Username :              user
  Password :              passw0rd

              <Aceptar >      <Cancelar>
```

A menu will show you the configuration of MySQL.

```
ArchLinux Installation
─────────────────────────────────────────────────────

                    ─MySQL Installation─
 MySQL Instalation is now completed. You can use this settings to connect
 to the server:

 Username: root
 Password: root

 MySQL User
 User: usuari
 Password: usuari

                        <Aceptar>
```

Finished the installation a menu will tell you the IP of the machine to connect:

```
ArchLinux Installation
─────────────────────────────────────────────────────

                    ─Apache Installation─
             Apache Instalation is now completed.
             You can use this settings to connect
             to the server:
             IP: 192.168.1.16

                        <Aceptar>
```

OwnCloud

You can change the default URI of OwnCloud

```
ArchLinux Installation

            Owncloud Instalation
    Do you want to change the default address
    for owncloud?
    (Default http://domain.com/owncloud/)

          <  Sí  >        <  No  >
```
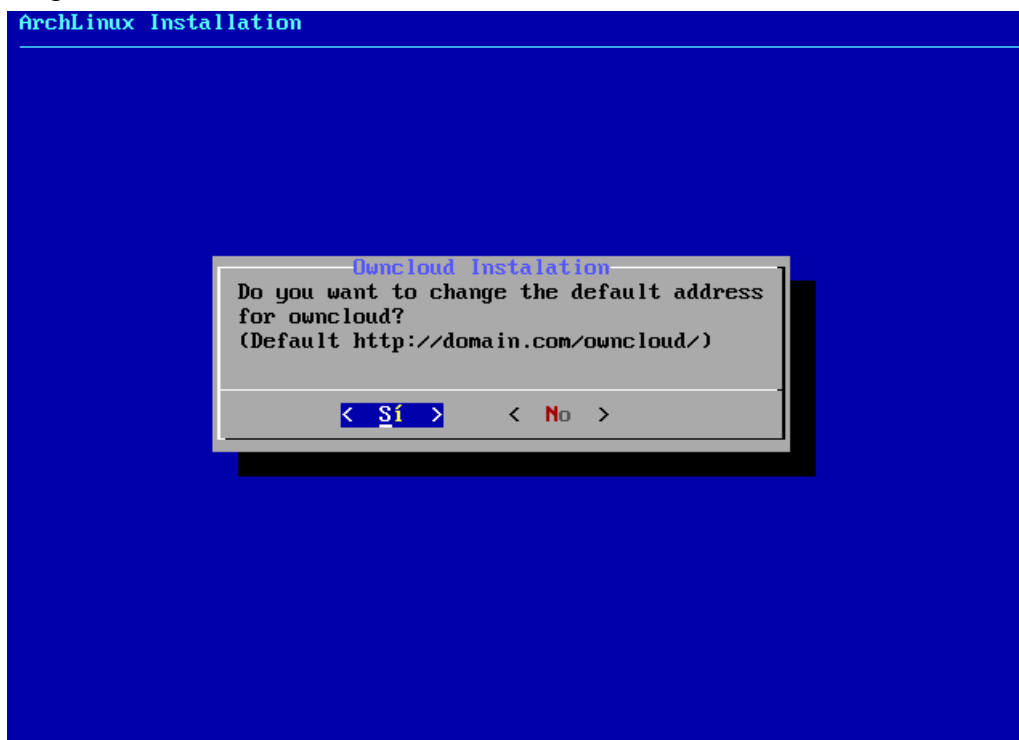
Write the new URI to access OwnCloud:

```
ArchLinux Installation

            Owncloud Instalation
    Enter the address that you want to use:
    (Ej: acloud = http://domain.com/acloud)

     files_

          <Aceptar >        <Cancelar>
```
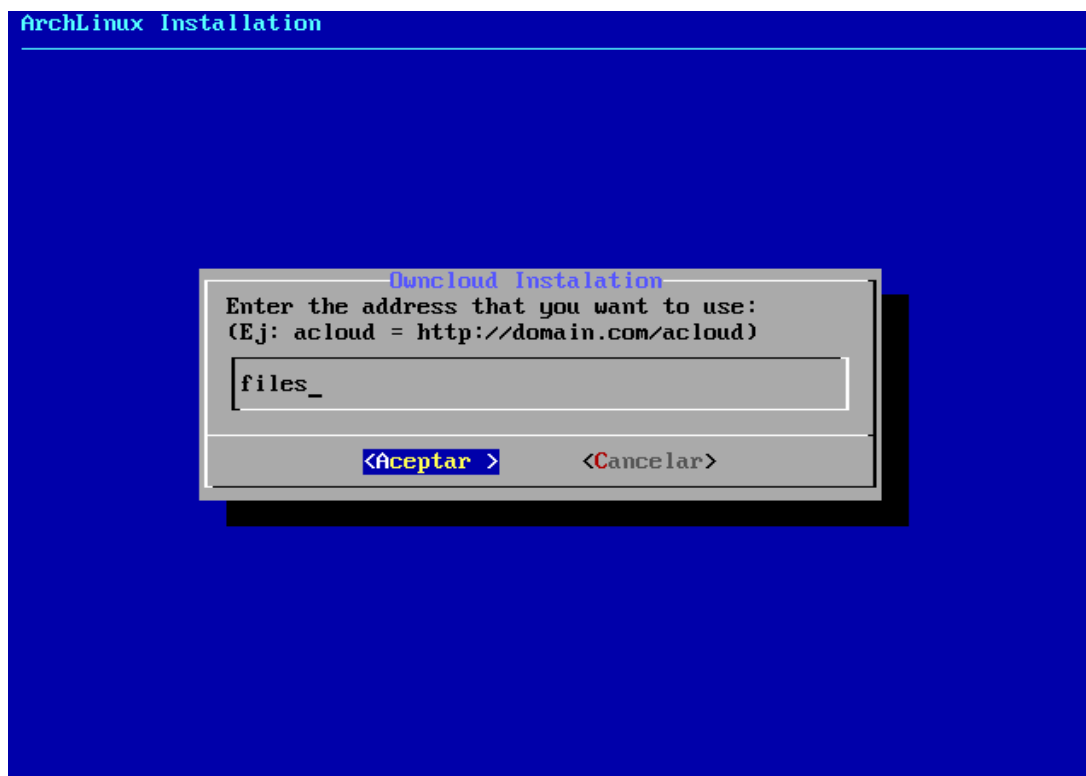
You can change the default port of OwnCloud

```
ArchLinux Installation
┌─────────────────────────────────────────────────────────┐
│                                                           │
│                                                           │
│                                                           │
│              ┌───────Owncloud Instalation───────┐         │
│              │ Do you want to change the default port │    │
│              │ for owncloud?                     │         │
│              │ (Default: 80)                     │         │
│              │                                   │         │
│              │                                   │         │
│              │      < Sí >        <  No  >       │         │
│              └───────────────────────────────────┘         │
│                                                           │
│                                                           │
└─────────────────────────────────────────────────────────┘
```
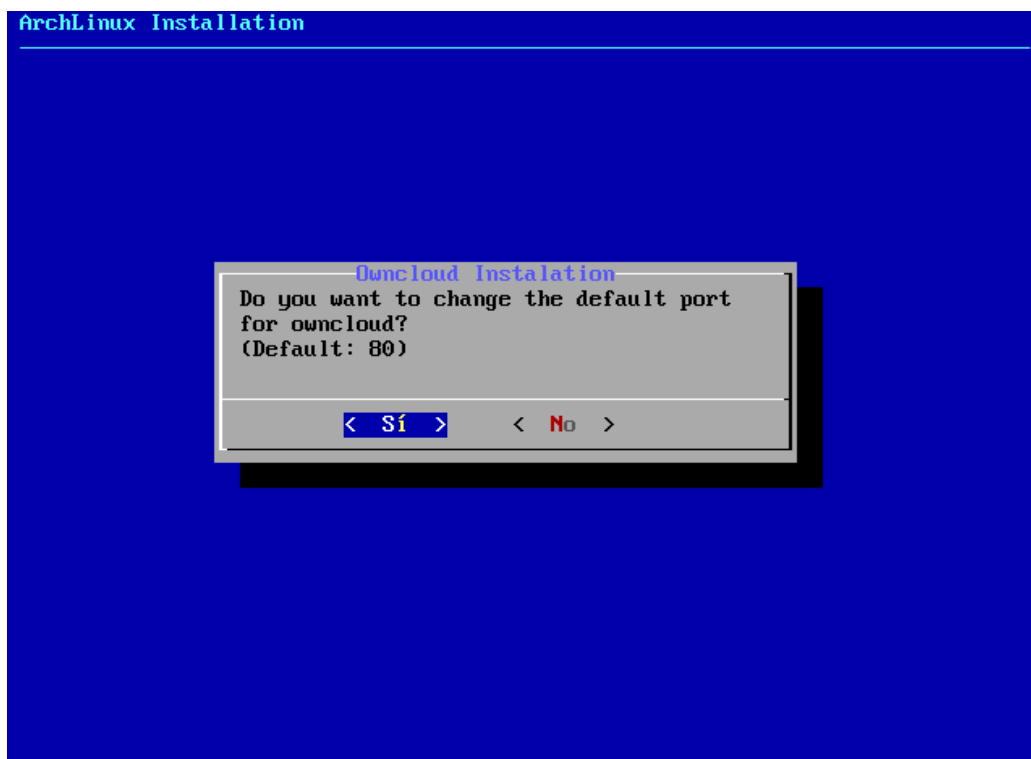
Write the port do you want to use for OwnCloud

```
ArchLinux Installation
┌─────────────────────────────────────────────────────────┐
│                                                           │
│                                                           │
│              ┌───────Owncloud Instalation───────┐         │
│              │ Enter the port that you want to use: │      │
│              │ (Ej: 5297 = http://domain.com:5297) │      │
│              │                                   │         │
│              │ 5249_                             │         │
│              │     <Aceptar >      <Cancelar>    │         │
│              └───────────────────────────────────┘         │
│                                                           │
│                                                           │
└─────────────────────────────────────────────────────────┘
```
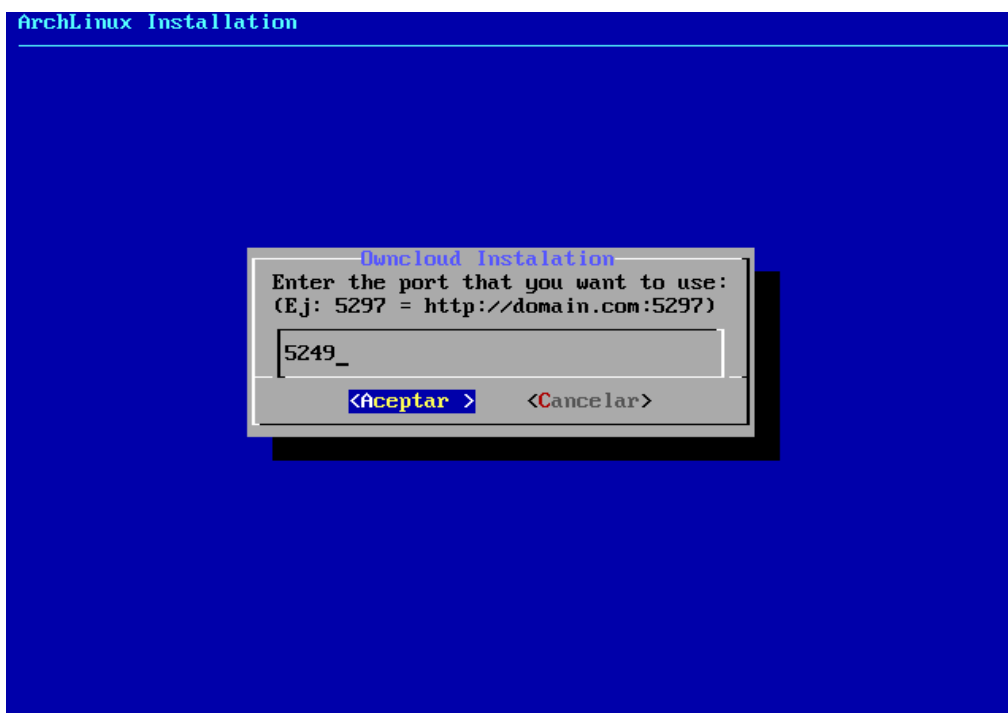
Write the password for the database of OwnCloud

```
Archlinux Installation
─────────────────────────────────────────────

            Enter owncloud's database password:
            ┌─────────────────────────────────┐
            │                                 │
            └─────────────────────────────────┘

                <Aceptar >     <Cancelar>
```
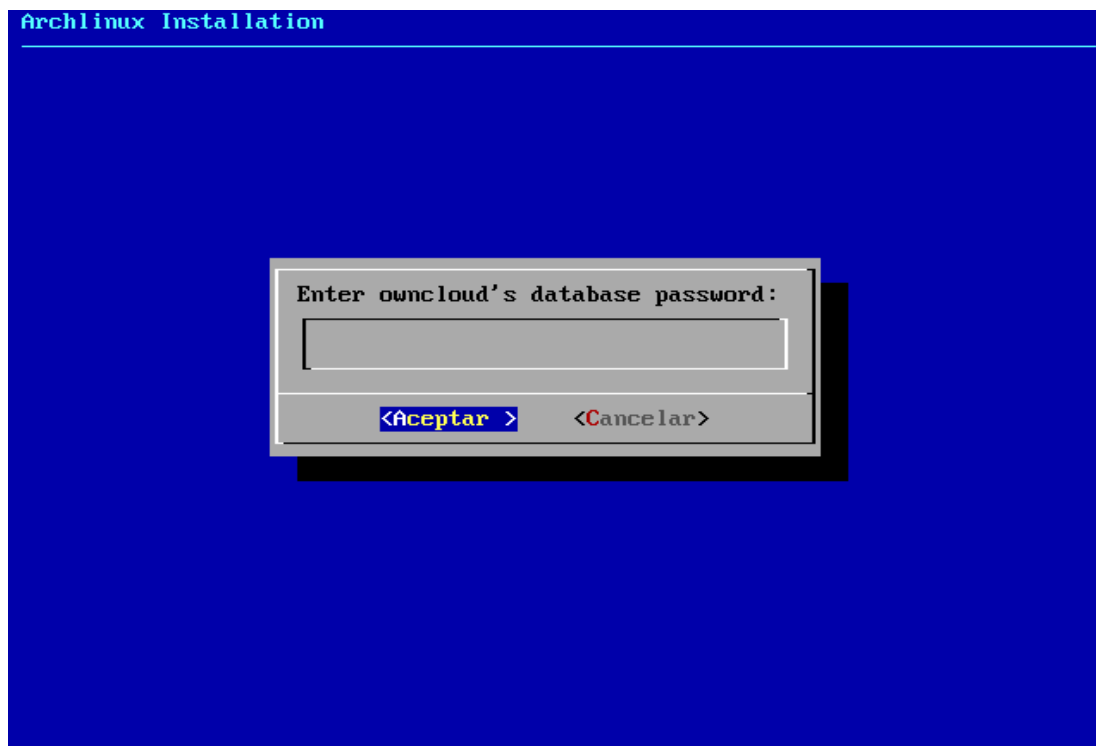
Finished the installation a menu will tell you the URI to use OwnCloud:

```
ArchLinux Installation
─────────────────────────────────────────────

              ─Owncloud Installation─
            Owncloud Instalation is now completed.
            You can use this settings to connect
            to the server:
            Address: 192.168.1.4/files1

                    <Aceptar>
```
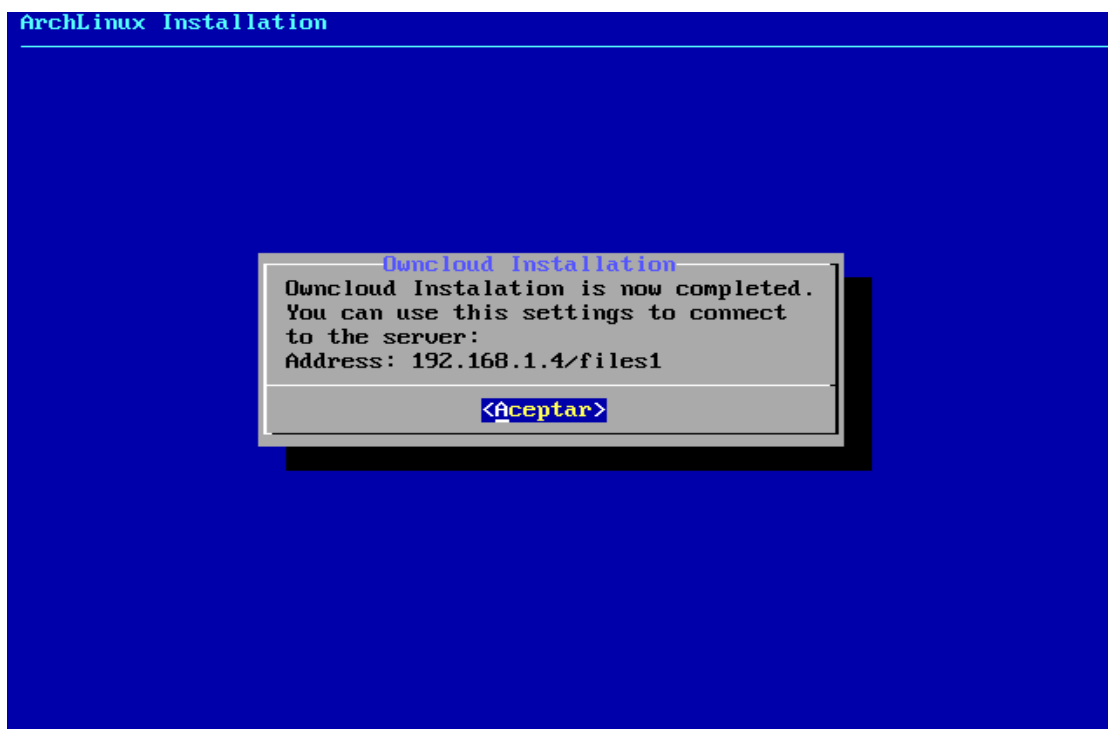
WordPress

You can change the default URI of WordPress

```
ArchLinux Installation

                    Wordpress Instalation
              Do you want to change the default address
              for Wordpress?
              (Default http://domain.com/wordpress/)

                    <  Sí  >        <  No  >
```

Write the new URI to access WordPress

```
ArchLinux Installation

                    Wordpress Instalation
              Enter the address that you want to use
              (Ej: myblog = http://domain.com/myblog)

              myblog_

                    <Aceptar >        <Cancelar>
```
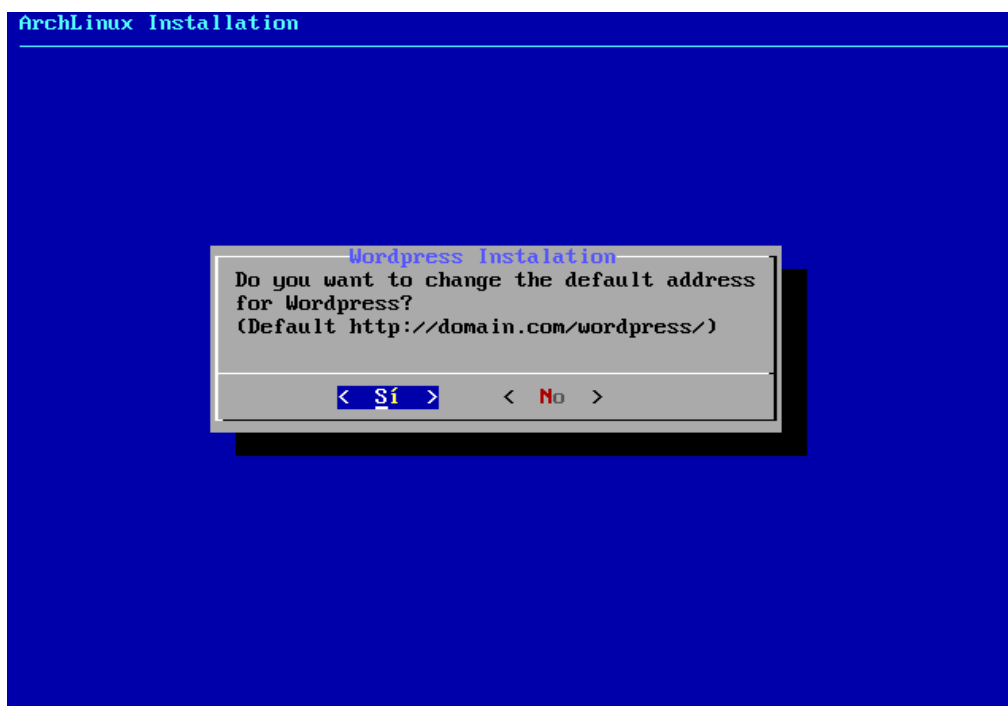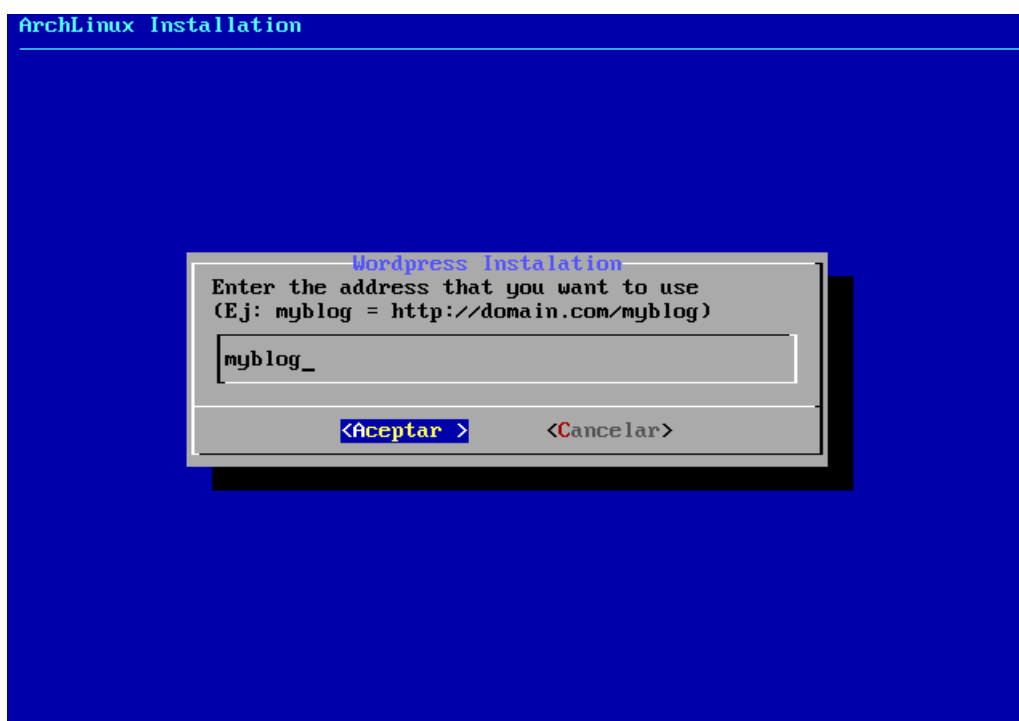
Write the password for the database of WordPress
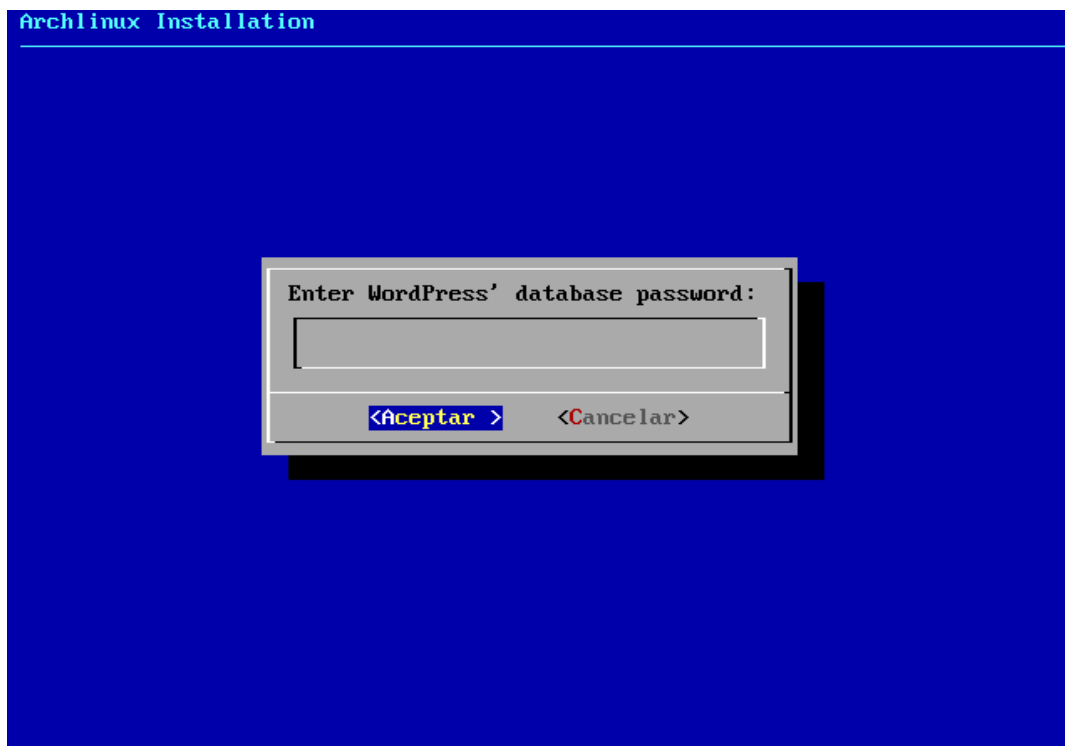
Finished the installation a menu will tell you the URI to access WordPress:
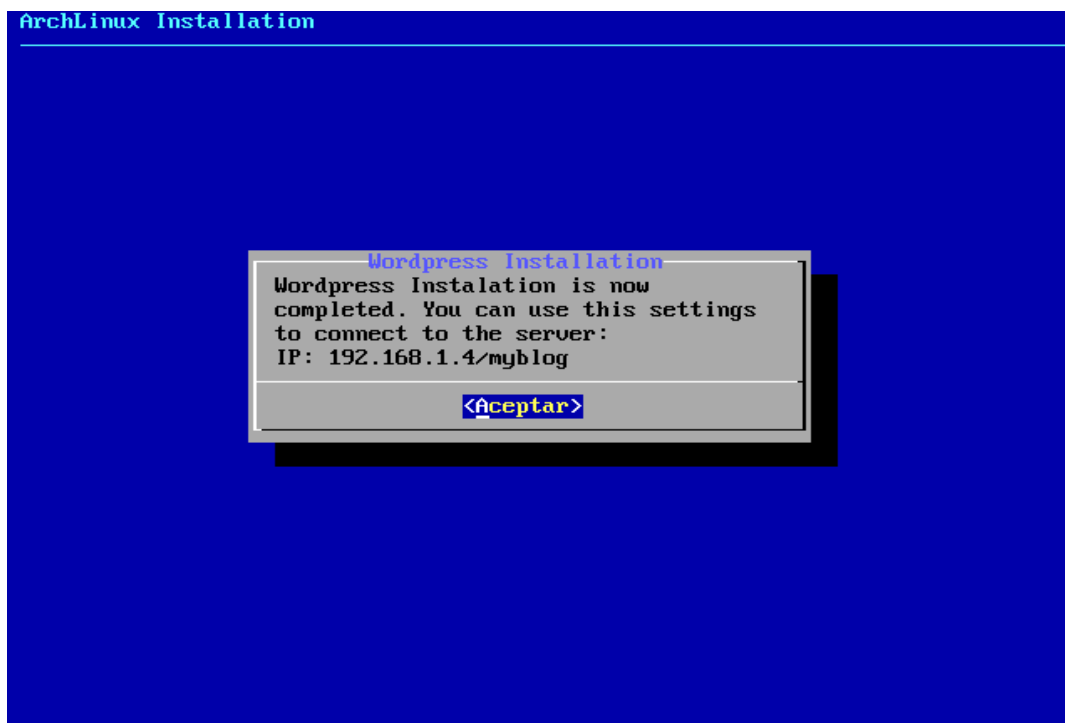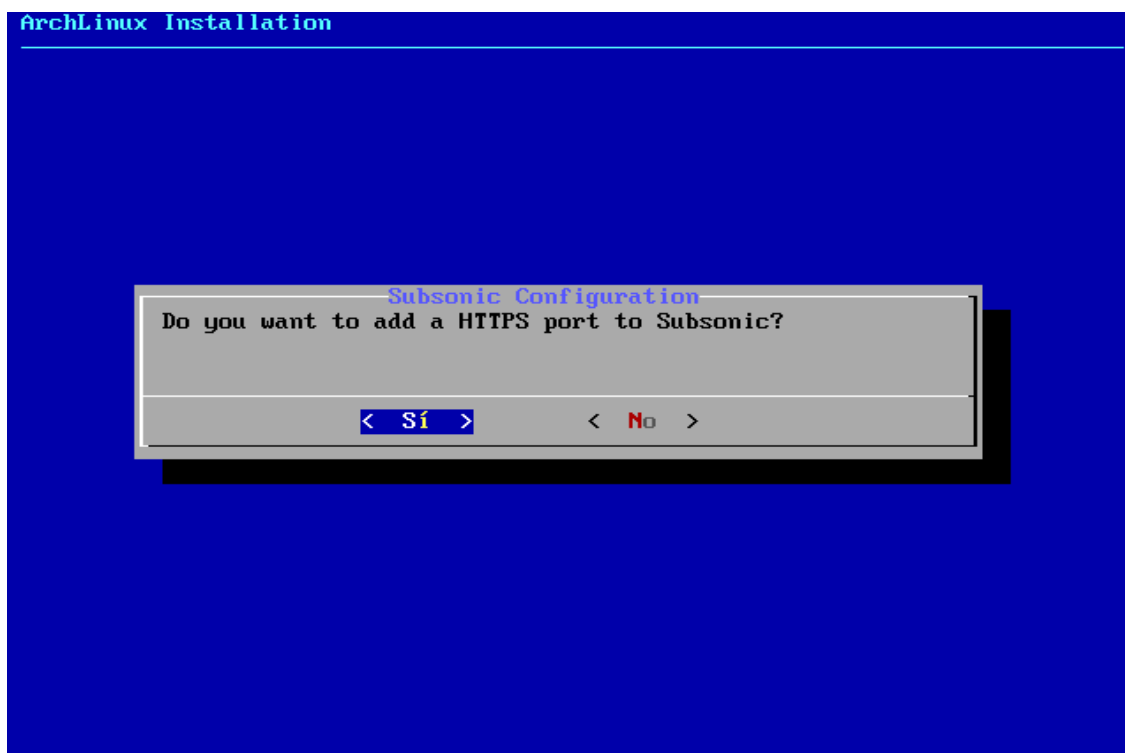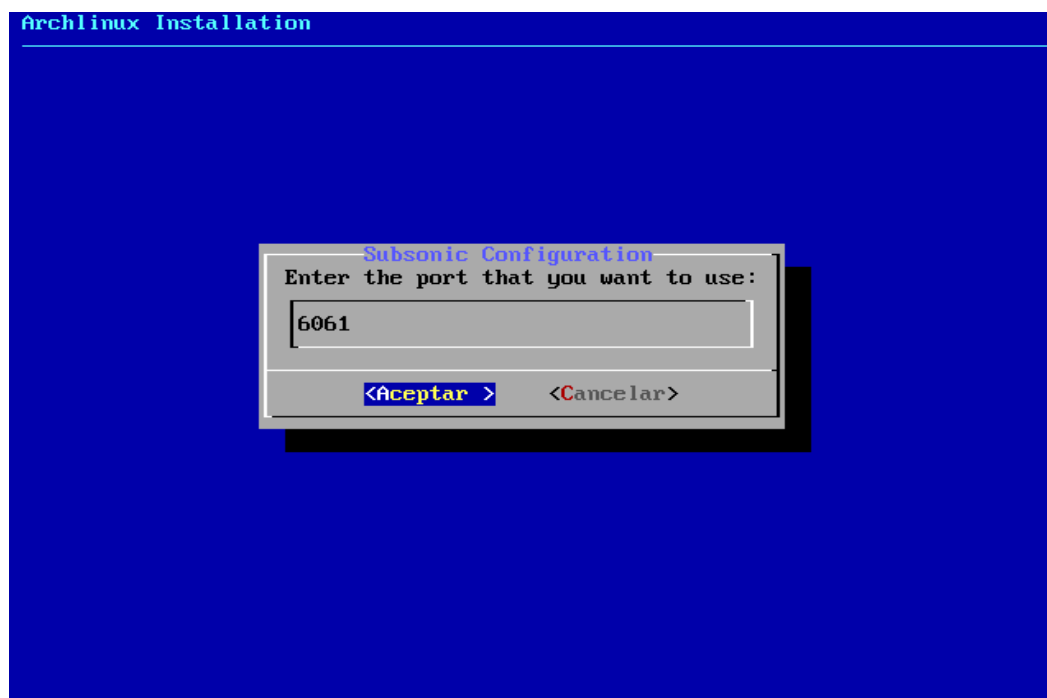
SubSonic

You can change the default port of SubSonic:
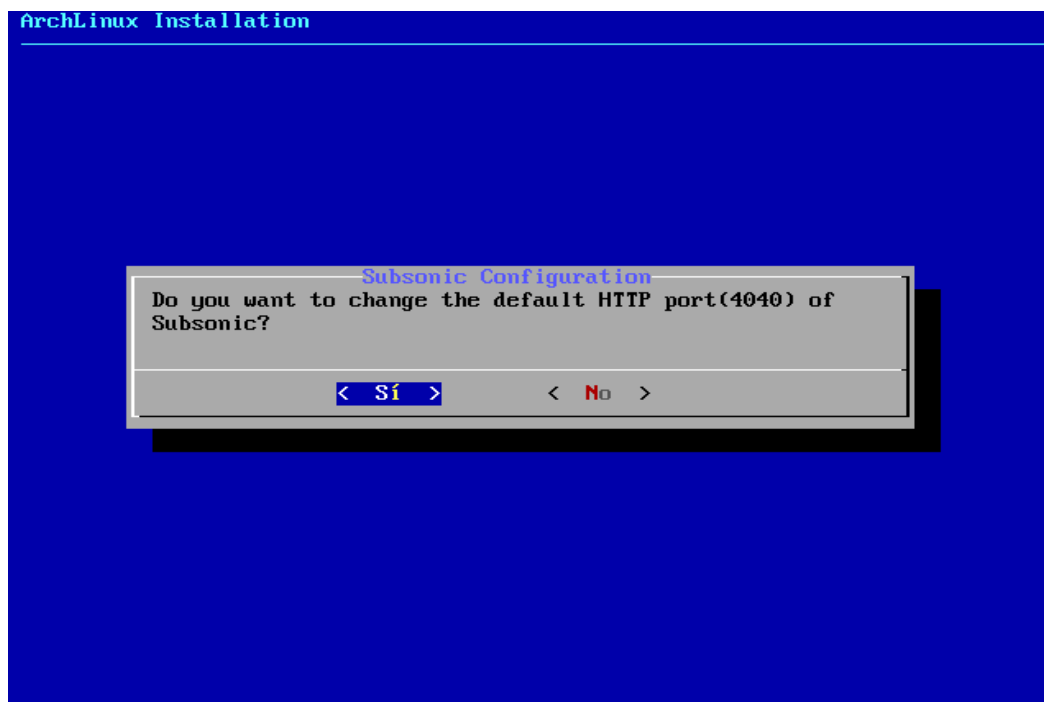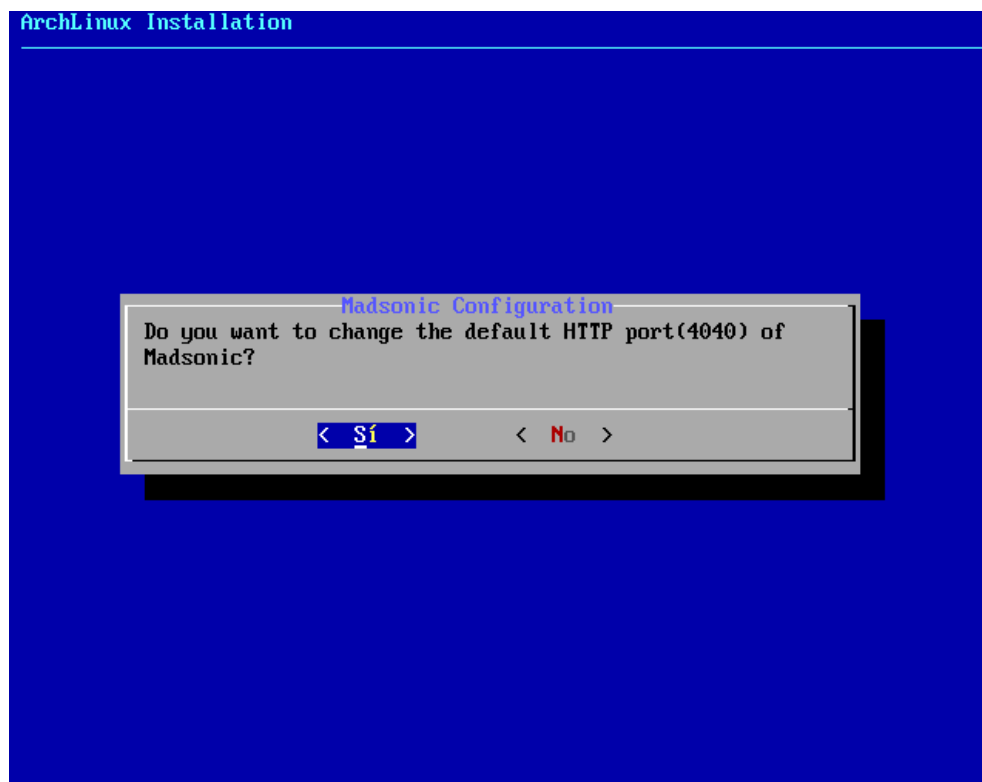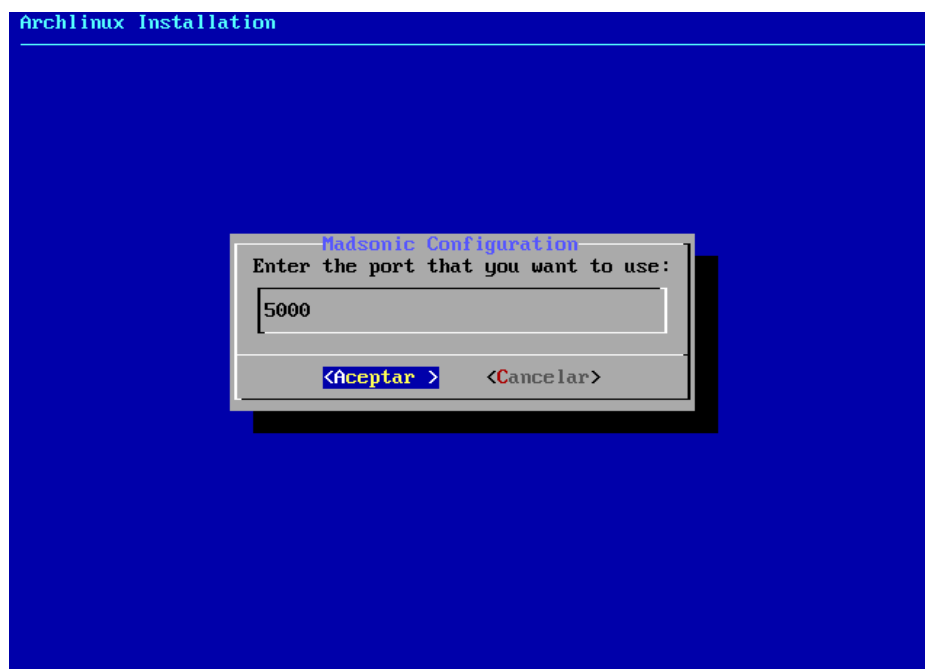

Write the port do you want to use for SubSonic
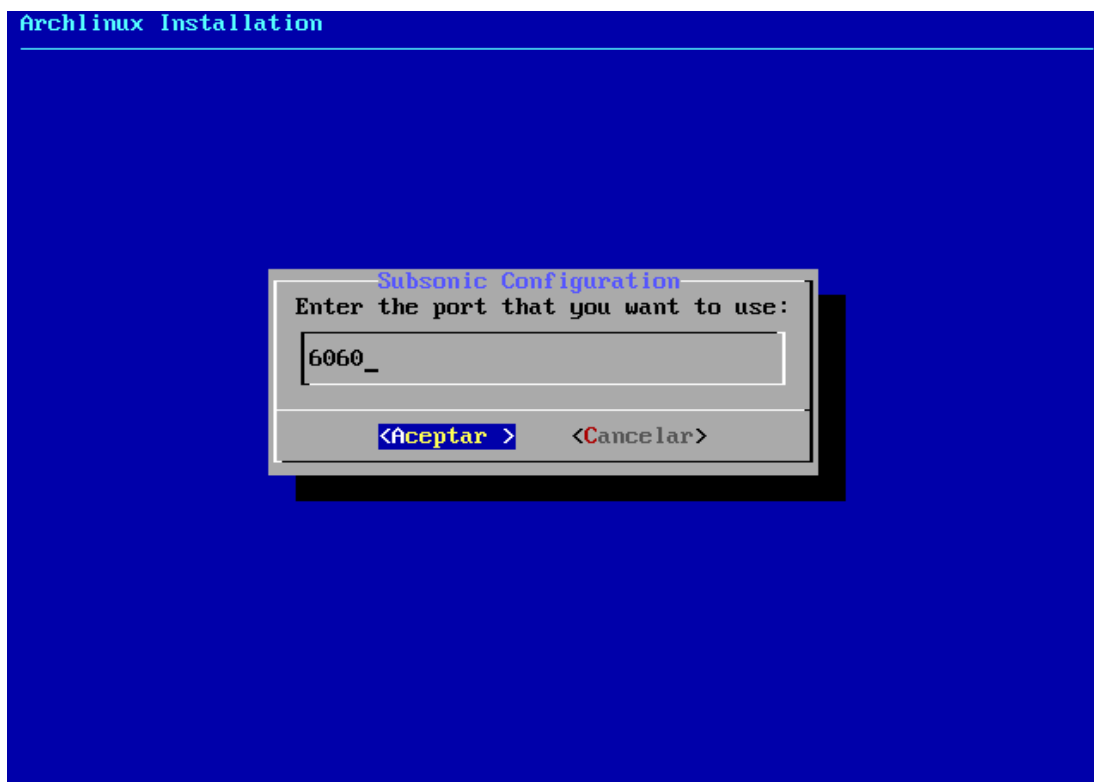
You can add a HTTPS port for SubSonic, just for security.

```
ArchLinux Installation

                    ┌──────Subsonic Configuration──────┐
                    │ Do you want to add a HTTPS port to Subsonic? │
                    │                                    │
                    │                                    │
                    │     <  Sí  >        <  No  >       │
                    └────────────────────────────────────┘
```

Write the HTTPS port used for SubSonic

```
Archlinux Installation

                    ┌──────Subsonic Configuration──────┐
                    │ Enter the port that you want to use: │
                    │                                    │
                    │  6061                              │
                    │                                    │
                    │     <Aceptar >    <Cancelar>       │
                    └────────────────────────────────────┘
```

Finished the installation a menu will tell you the URI to access SubSonic:
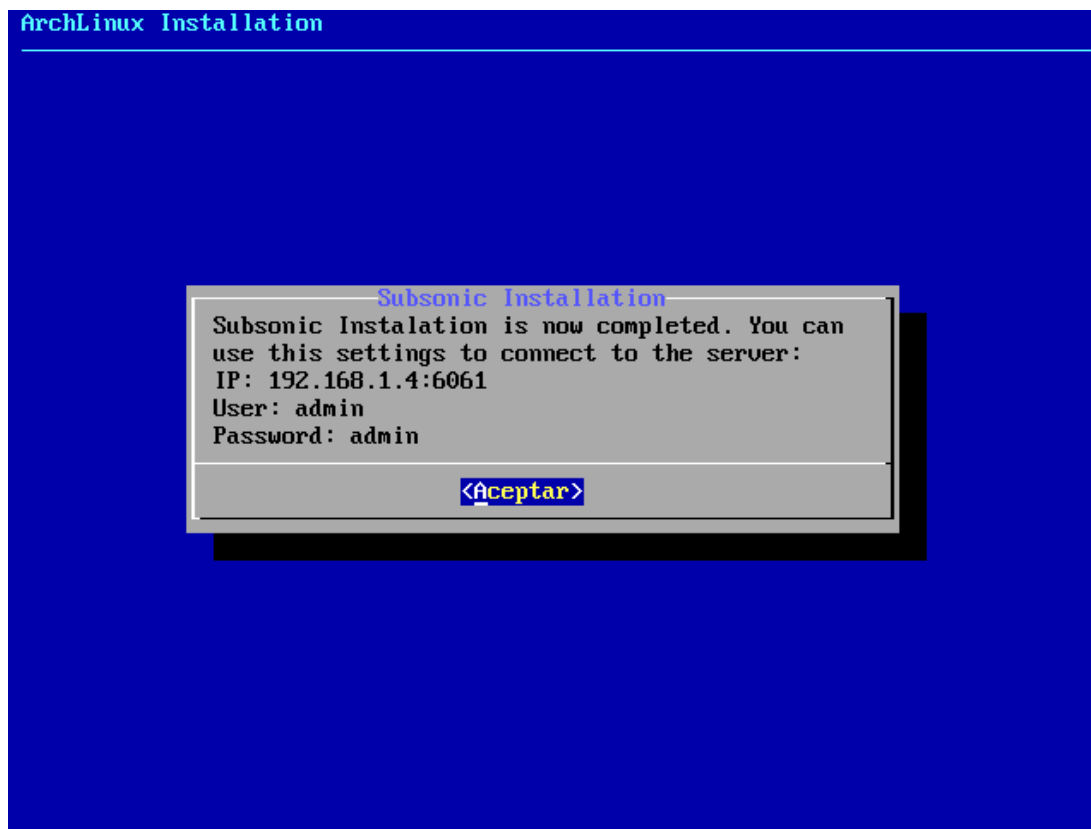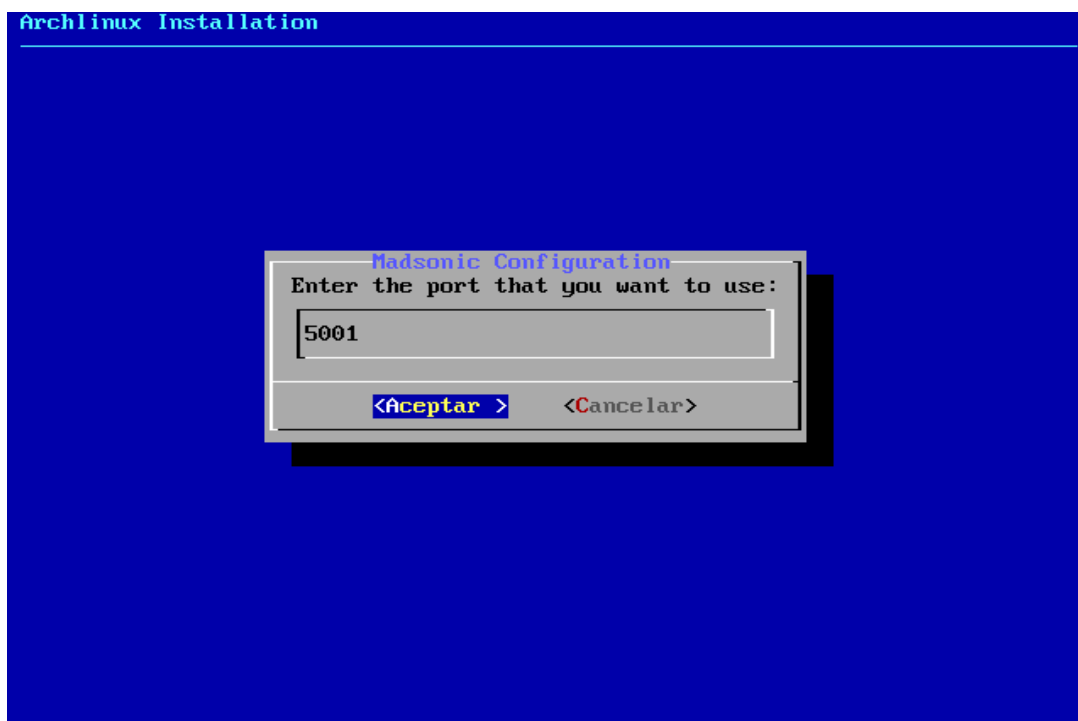
MadSonic

You can change the default port of MadSonic

```
ArchLinux Installation


                      ┌──────── Madsonic Configuration ────────┐
                      │ Do you want to change the default HTTP port(4040) of │
                      │ Madsonic?                              │
                      │                                        │
                      │      <  Sí  >          <  No  >        │
                      └────────────────────────────────────────┘
```

Write the port do you want to use for MadSonic

```
Archlinux Installation


                   ┌──────── Madsonic Configuration ────────┐
                   │ Enter the port that you want to use:   │
                   │ ┌────────────────────────────────────┐ │
                   │ │5000                                │ │
                   │ └────────────────────────────────────┘ │
                   │    <Aceptar >      <Cancelar>          │
                   └────────────────────────────────────────┘
```
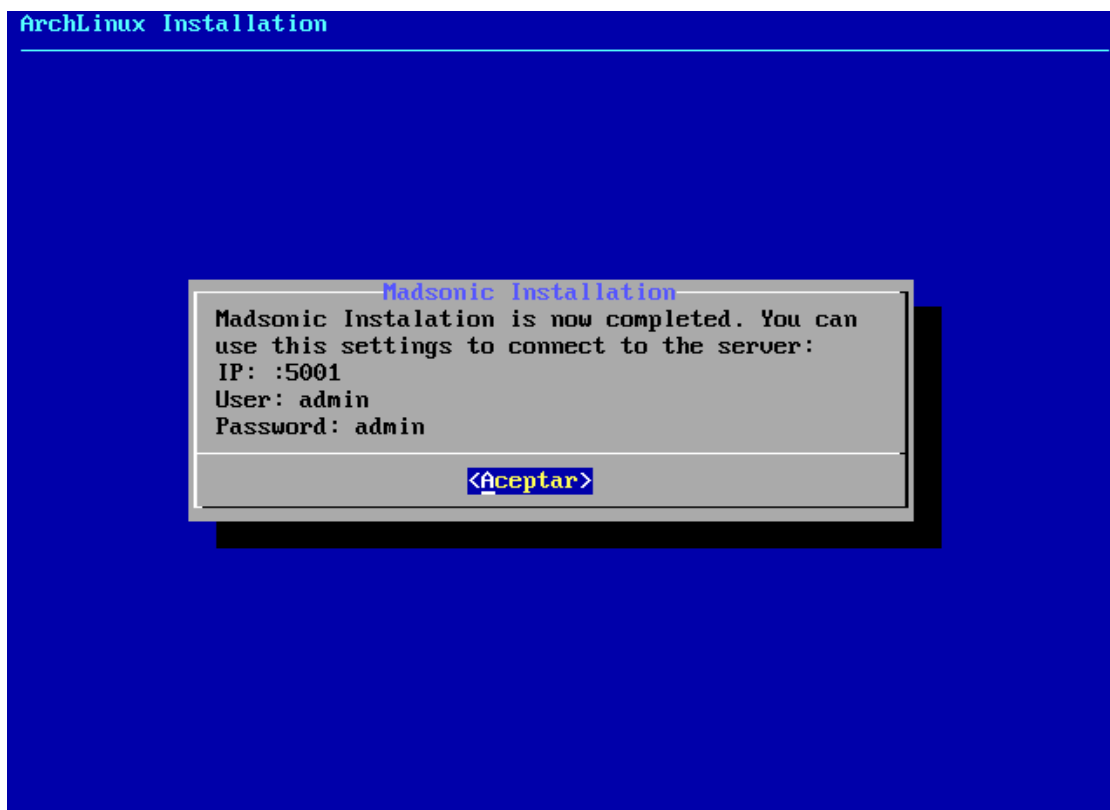
You can add a HTTPS port for MadSonic, just for security.

Write the HTTPS port used for MadSonic

Finished the installation a menu will tell you the URI to access MadSonic:
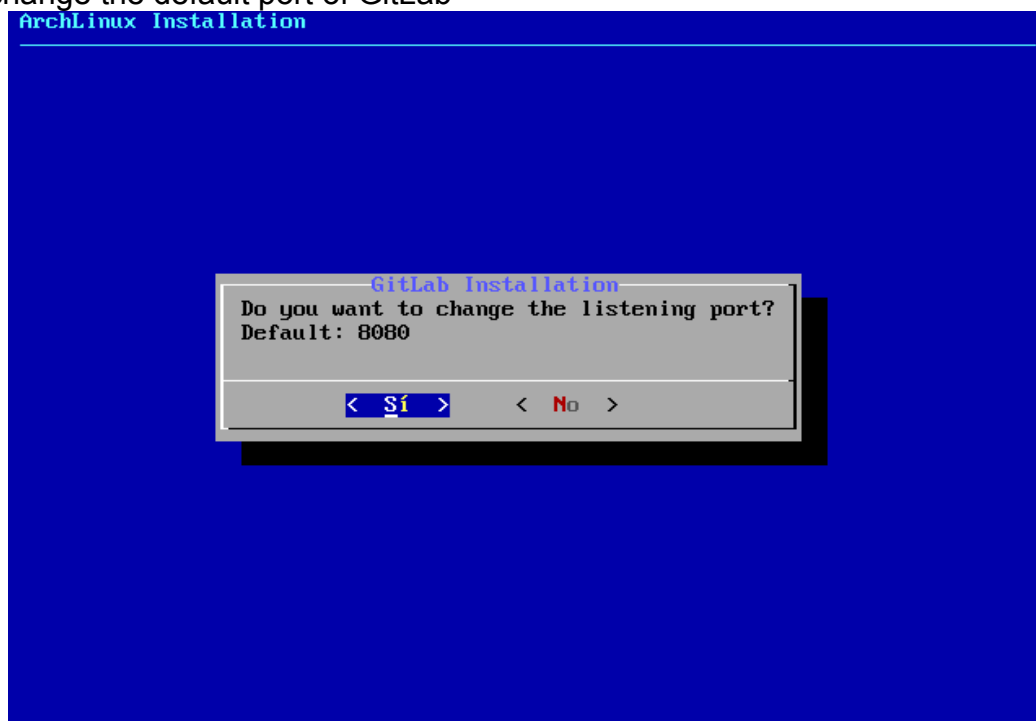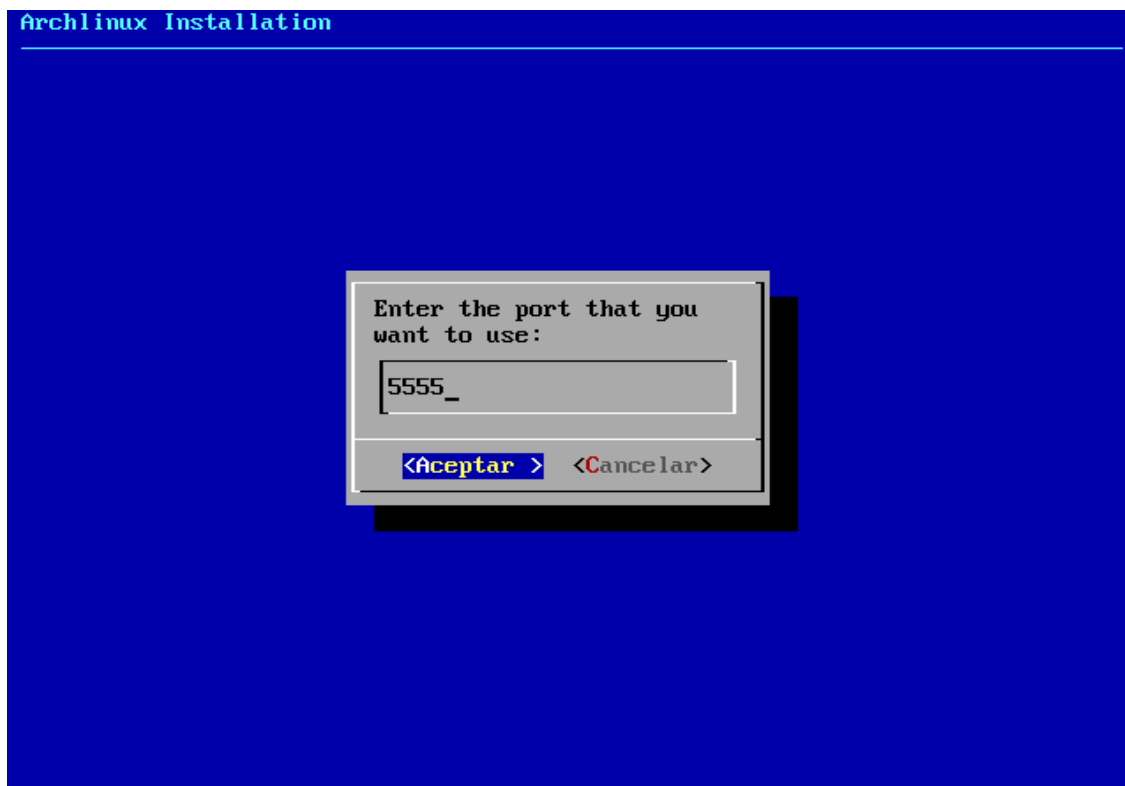
```
ArchLinux Installation


                        Madsonic Installation
          Madsonic Instalation is now completed. You can
          use this settings to connect to the server:
          IP: :5001
          User: admin
          Password: admin

                         <Aceptar>
```

GitLab
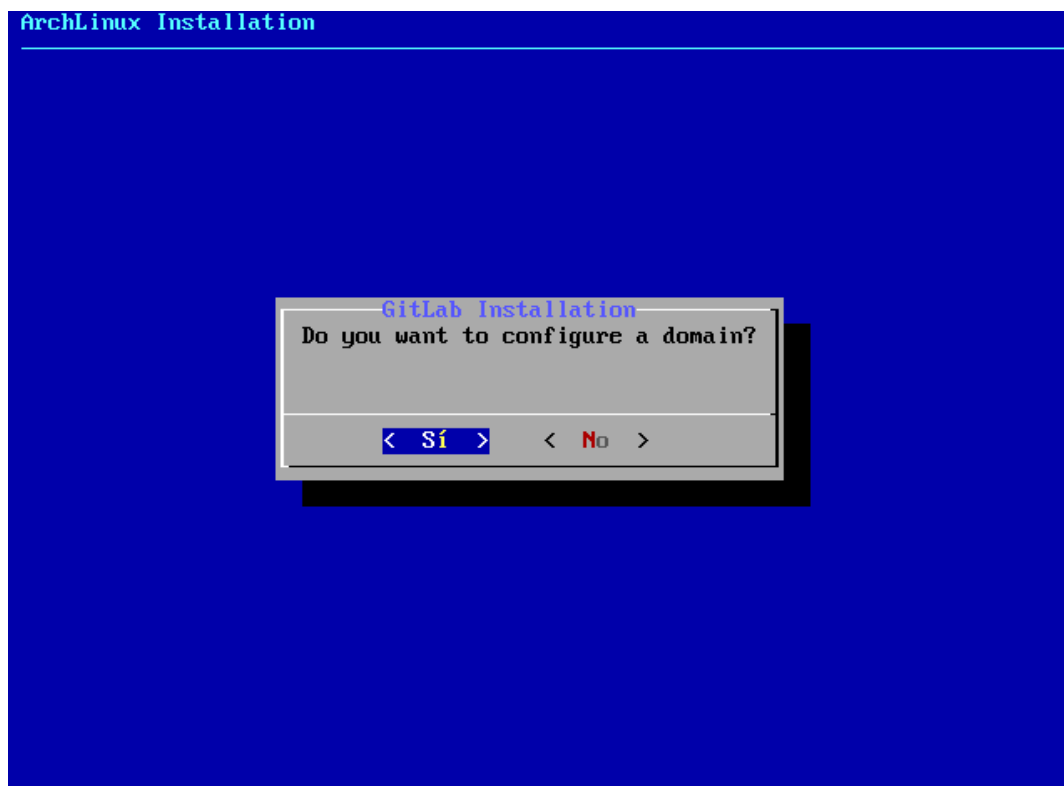
Write the password for the database of GitLab
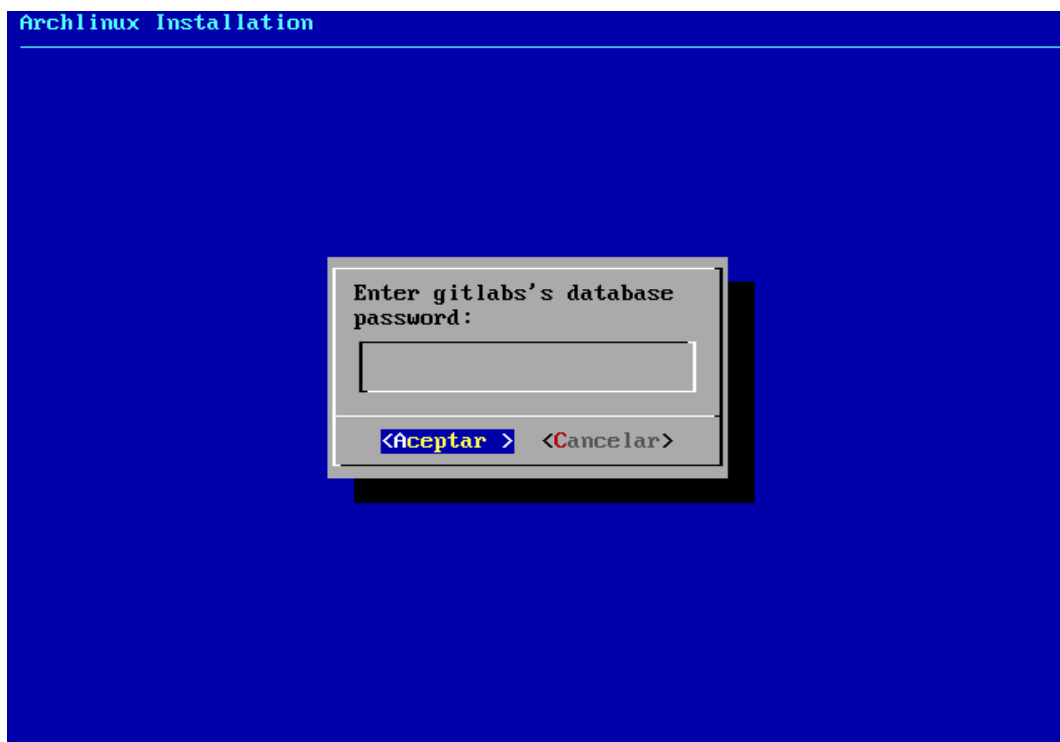
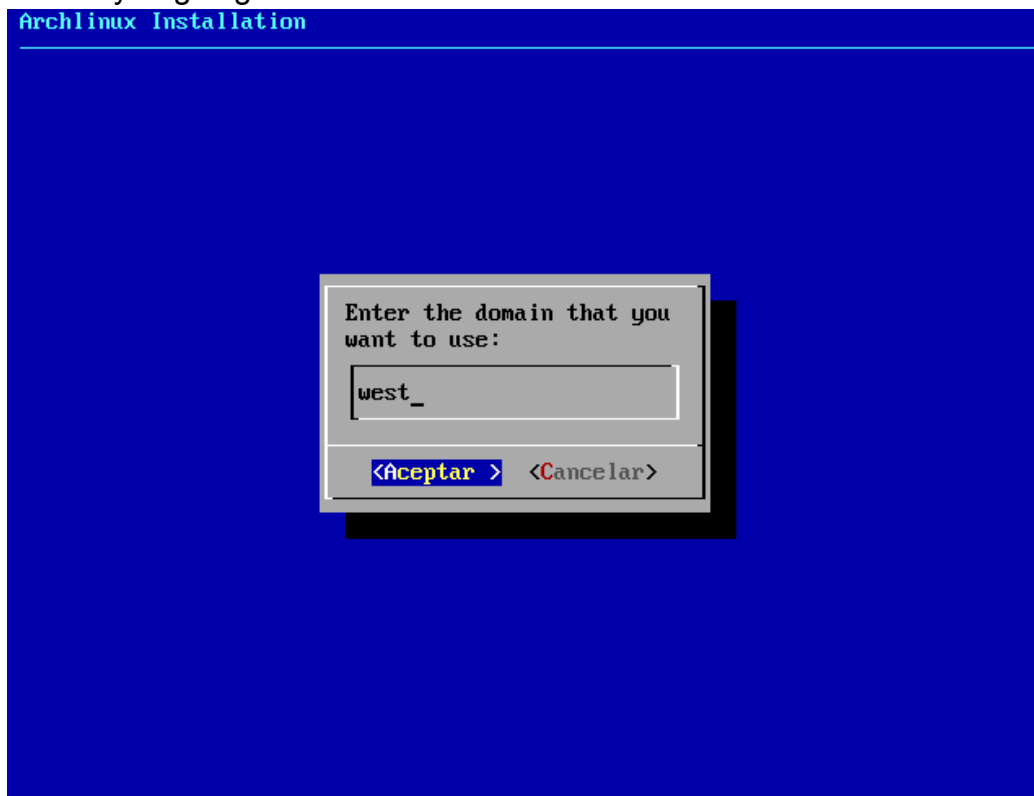
You can change the default port of GitLab
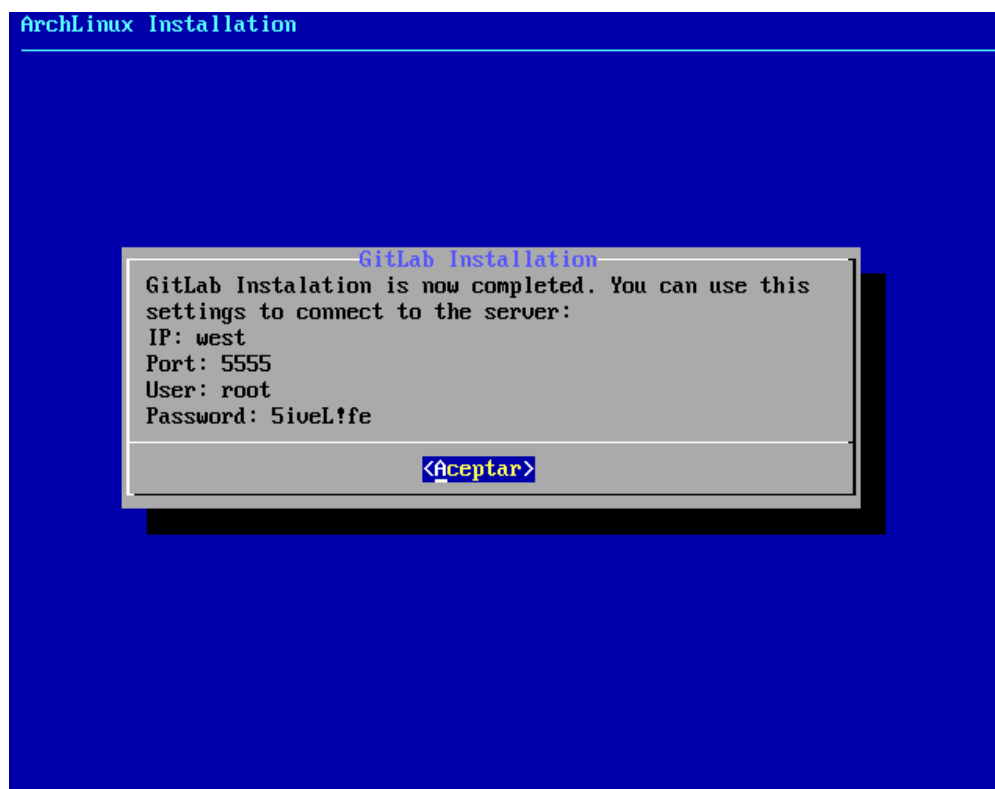
Write the port do you want to use for GitLab

You can configure a domain.
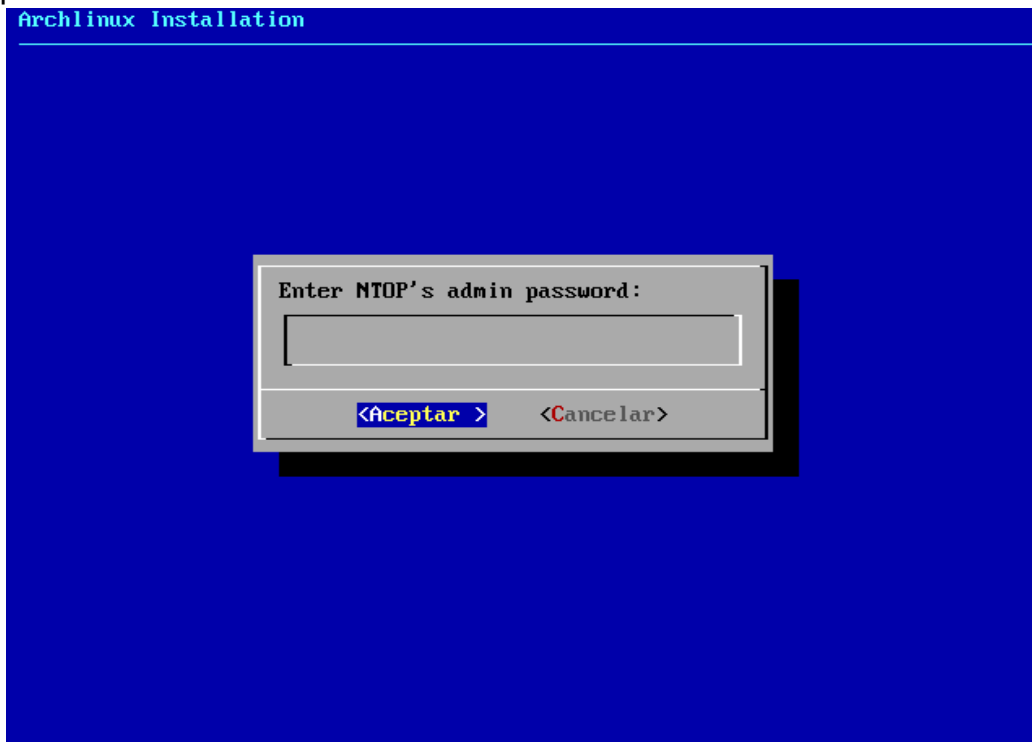
Write the domain you going to use.

```
Archlinux Installation

                    Enter the domain that you
                    want to use:

                    west_

                    <Aceptar >   <Cancelar>
```

Finished the installation a menu will tell you the URI to access GitLab:

```
ArchLinux Installation

                    GitLab Installation
            GitLab Instalation is now completed. You can use this
            settings to connect to the server:
            IP: west
            Port: 5555
            User: root
            Password: 5iveL!fe

                         <Aceptar>
```
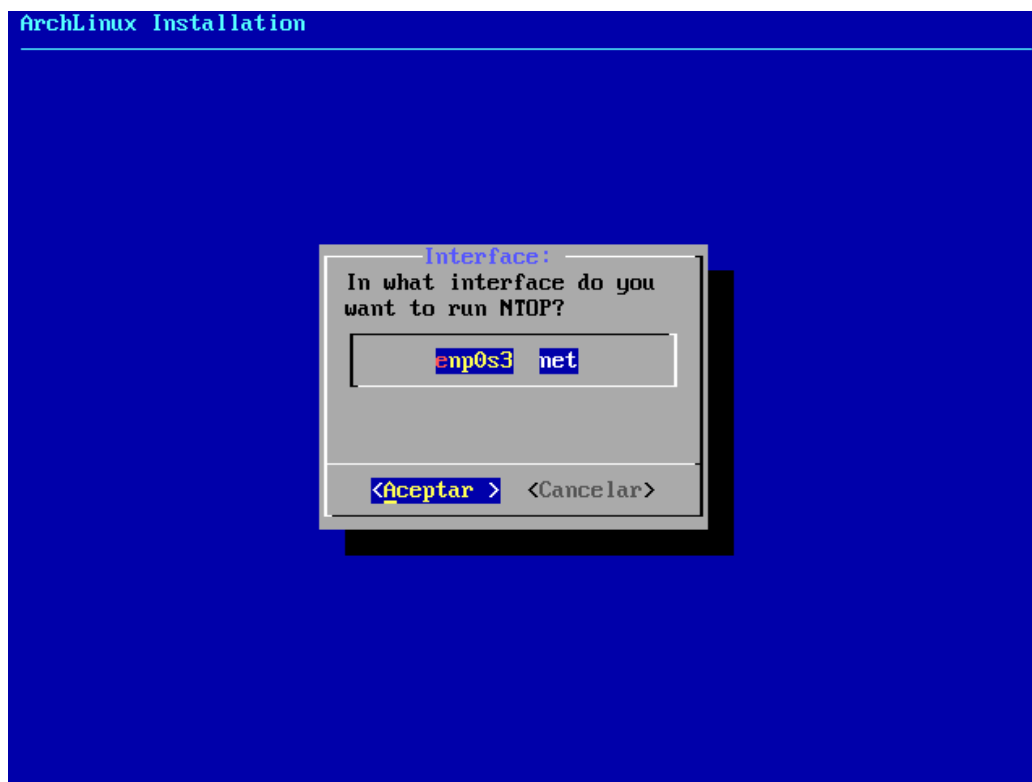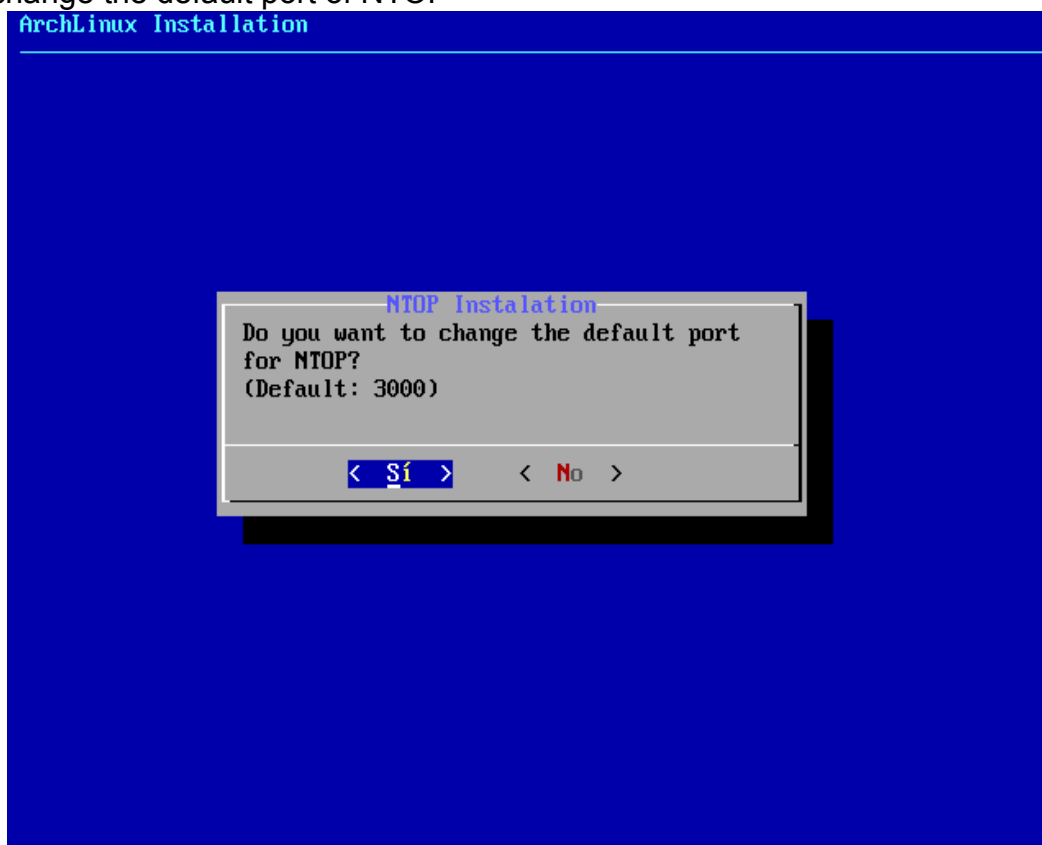
NTOP

Enter the password for the admin

Select in which interface NTOP will listen

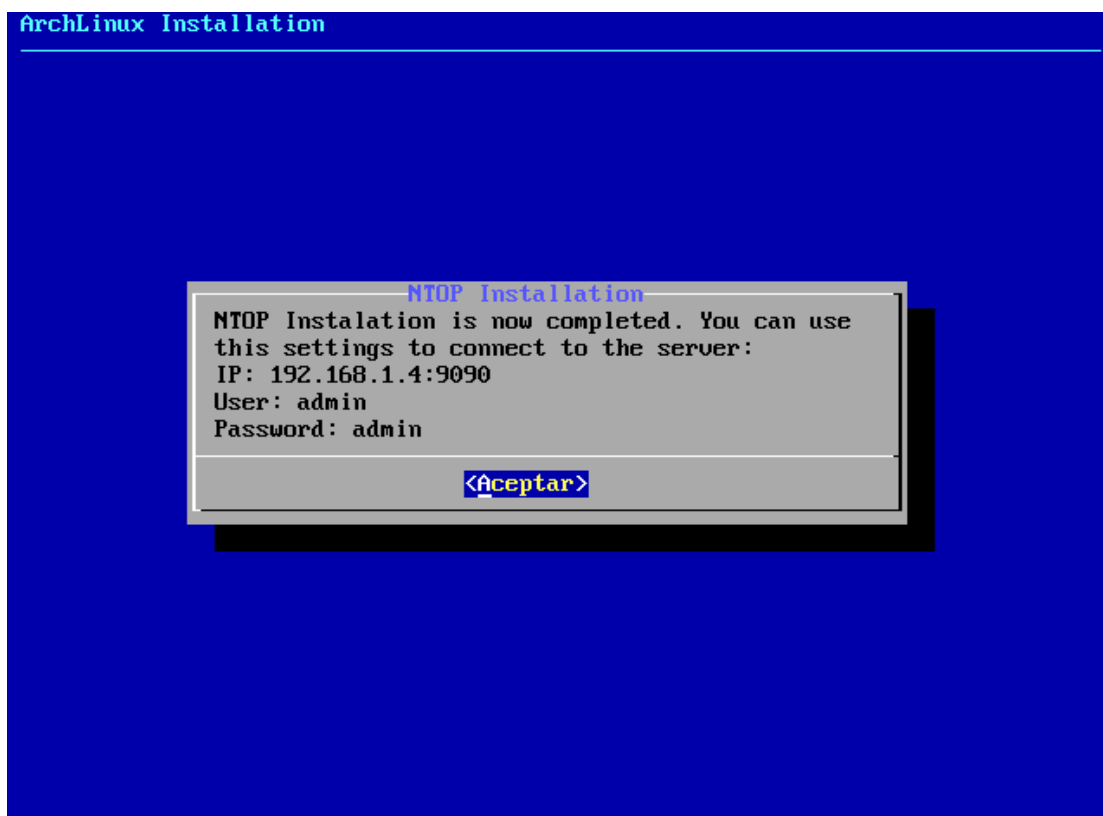You can change the default port of NTOP

```
ArchLinux Installation
───────────────────────────────────────────────────

            ┌──────NTOP Instalation──────┐
            │ Do you want to change the default port │
            │ for NTOP?                   │
            │ (Default: 3000)             │
            │                             │
            │                             │
            │   < Sí >       < No >       │
            └─────────────────────────────┘
```

Write the port do you want to use for NTOP

```
ArchLinux Installation
───────────────────────────────────────────────────

            ┌──────NTOP Instalation──────┐
            │ Enter the port that you want to use: │
            │ ┌─────────────────────────┐ │
            │ │9090_                    │ │
            │ └─────────────────────────┘ │
            │   <Aceptar >   <Cancelar>   │
            └─────────────────────────────┘
```

Finished the installation a menu will tell you the URI to access NTOP:

```
ArchLinux Installation
_____

                       NTOP Installation
         NTOP Instalation is now completed. You can use
         this settings to connect to the server:
         IP: 192.168.1.4:9090
         User: admin
         Password: admin

                         <Aceptar>
```
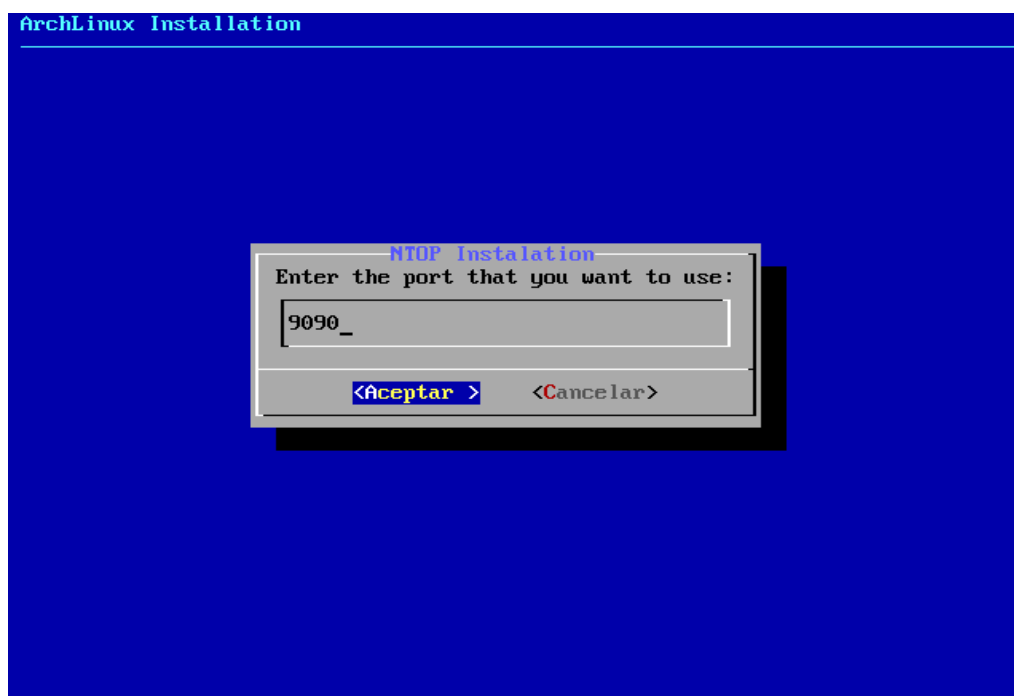
TightVNC

Write the password and later write "y" or "n" if you want a view-only password

```
 -> Comprimiendo el paquete...
==> Abandonando el entorno fakeroot.
==> Compilación terminada: tightvnc 1.3.10-10 (jue jun  4 16:43:42 UTC 2015)

==> Continuar la instalación de tightvnc? [S/n]
==> [v]isualizar los contenidos del paquete, [c]omprobar el paquete con namcap
==> --------------------------------------------------------------------------
==>
cargando los paquetes...
resolviendo dependencias...
buscando conflictos entre paquetes....

Paquetes (1) tightvnc-1.3.10-10

Tamaño total de la instalación:  2,04 MiB

:: ¿Continuar con la instalación? [S/n]
(1/1) comprobando las claves del depósito      [######################] 100%
(1/1) verificando la integridad de los paquetes [######################] 100%
(1/1) cargando los archivos de los paquetes     [######################] 100%
(1/1) comprobando conflictos entre archivos     [######################] 100%
(1/1) comprobando el espacio disponible en disco [######################] 100%
(1/1) instalando tightvnc                        [######################] 100%
==> Paquetes que ya no los requiere ningún paquete instalado:
    gendesk imake setconf
Using password file /home/usuari/.vnc/passwd
VNC directory /home/usuari/.vnc does not exist, creating.
Password:
Verify:
Would you like to enter a view-only password (y/n)? _
```
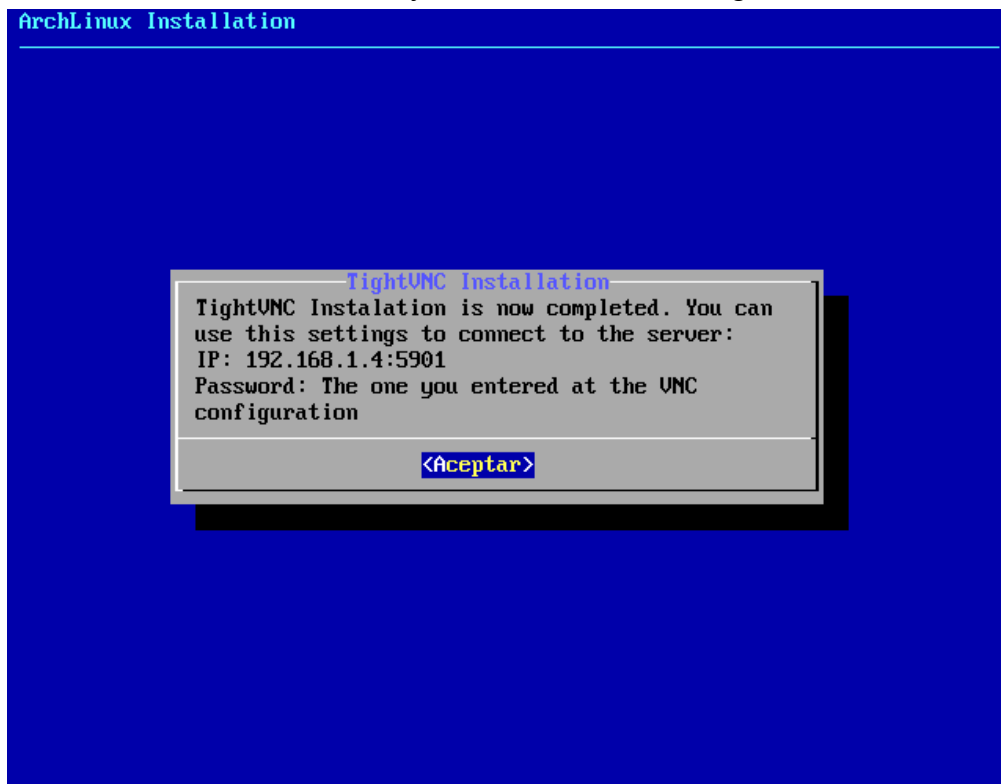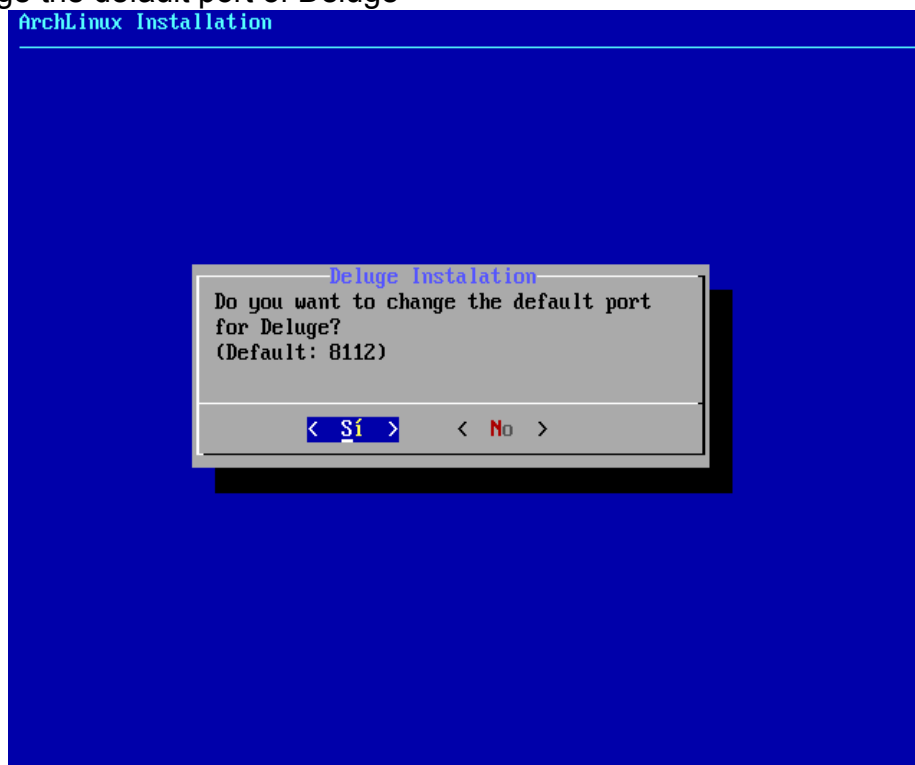
Finished the installation a menu will tell you the IP to access TightVNC:

```
ArchLinux Installation

        ┌────────────TightVNC Installation────────────┐
        │ TightVNC Instalation is now completed. You can │
        │ use this settings to connect to the server:    │
        │ IP: 192.168.1.4:5901                           │
        │ Password: The one you entered at the VNC       │
        │ configuration                                  │
        │              <Aceptar>                          │
        └────────────────────────────────────────────────┘
```

Deluge

You can change the default port of Deluge

```
ArchLinux Installation


                        ┌──────Deluge Instalation──────┐
                        │Do you want to change the default port│
                        │for Deluge?                    │
                        │(Default: 8112)                │
                        │                               │
                        ├───────────────────────────────┤
                        │    < Sí >        < No >        │
                        └───────────────────────────────┘
```

Write the port do you want to use for Deluge

```
ArchLinux Installation


                      ┌──────NTOP Instalation──────┐
                      │Enter the port that you want to use:│
                      │                            │
                      │ 5656_                      │
                      │                            │
                      ├────────────────────────────┤
                      │   <Aceptar >    <Cancelar> │
                      └────────────────────────────┘
```
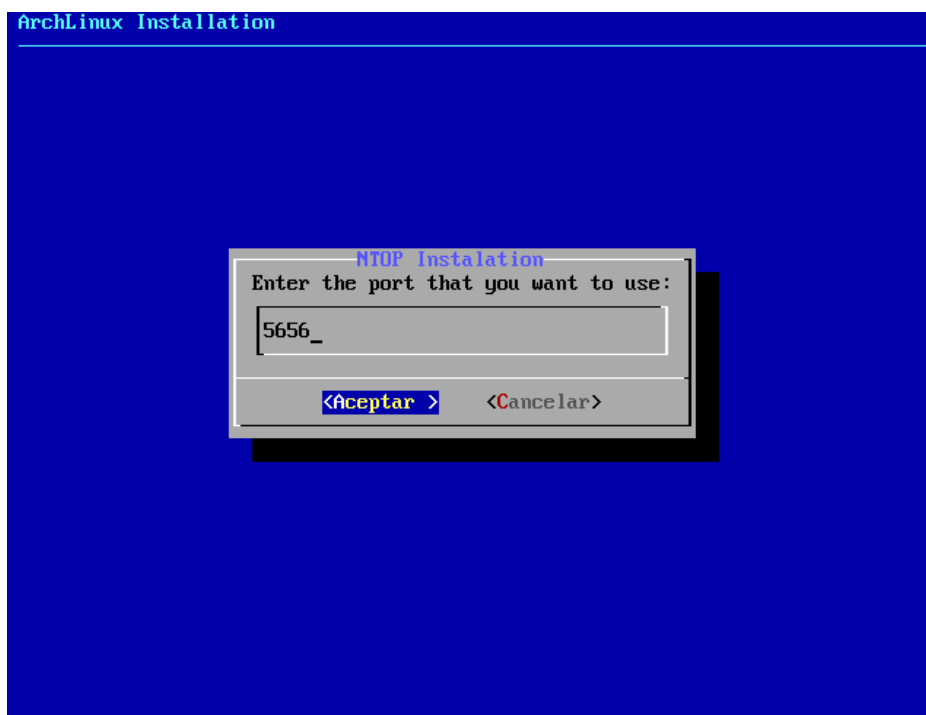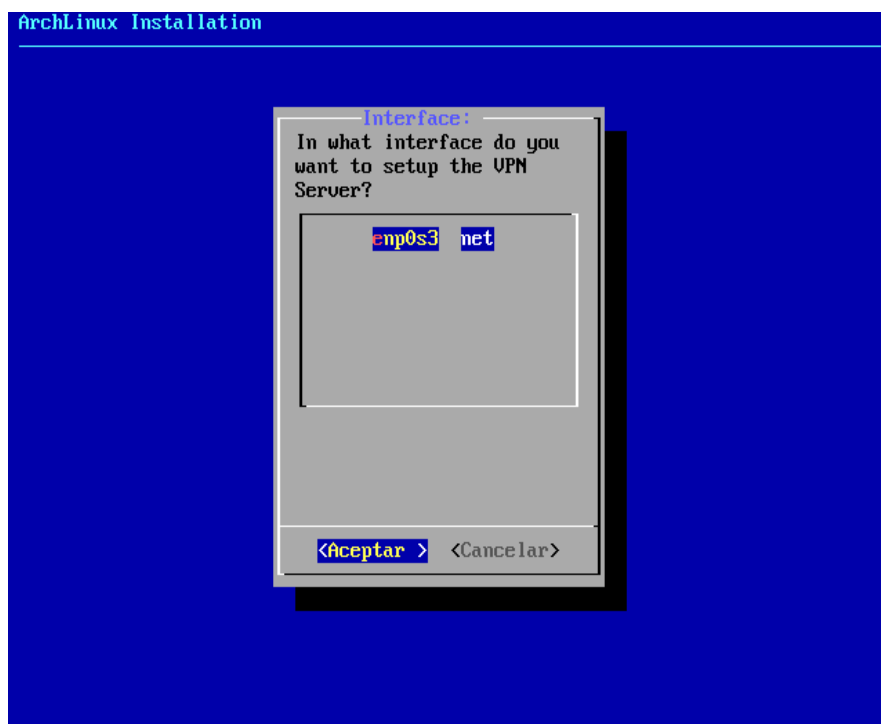
Finished the installation a menu will tell you the IP to access Deluge:
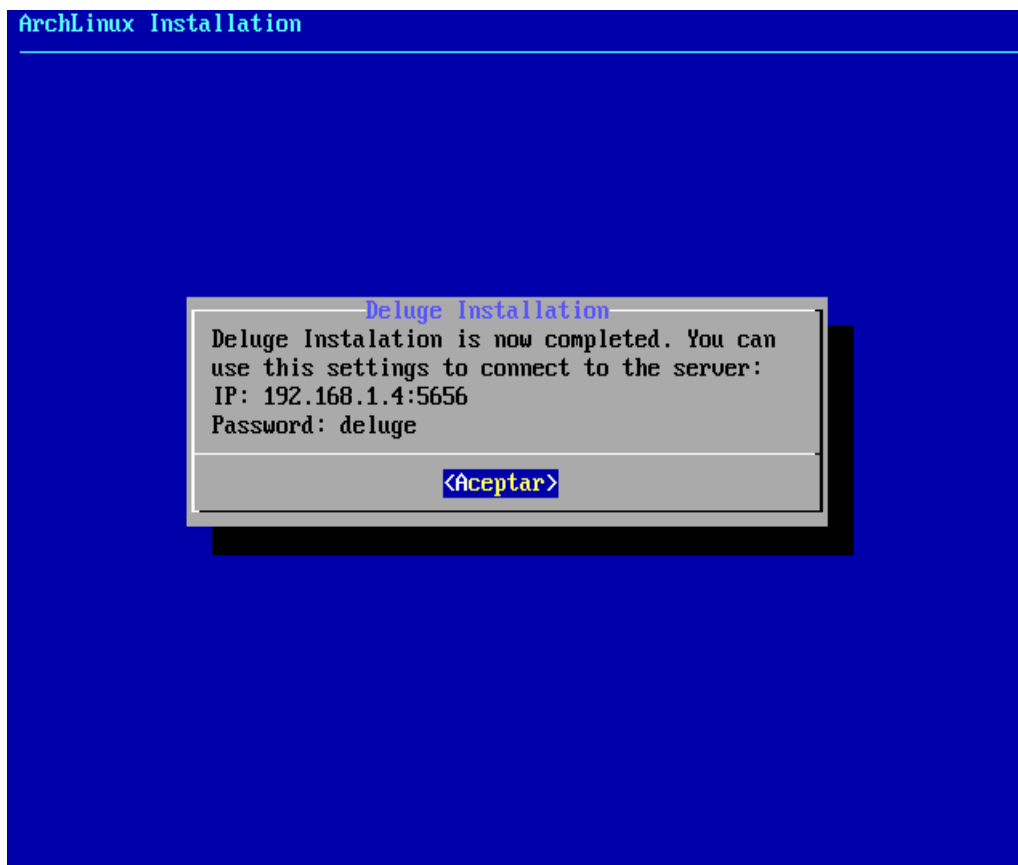
L2TP

Select in which interface L2TP will listen

Finished the installation a menu will tell you the IP to access the VPN: