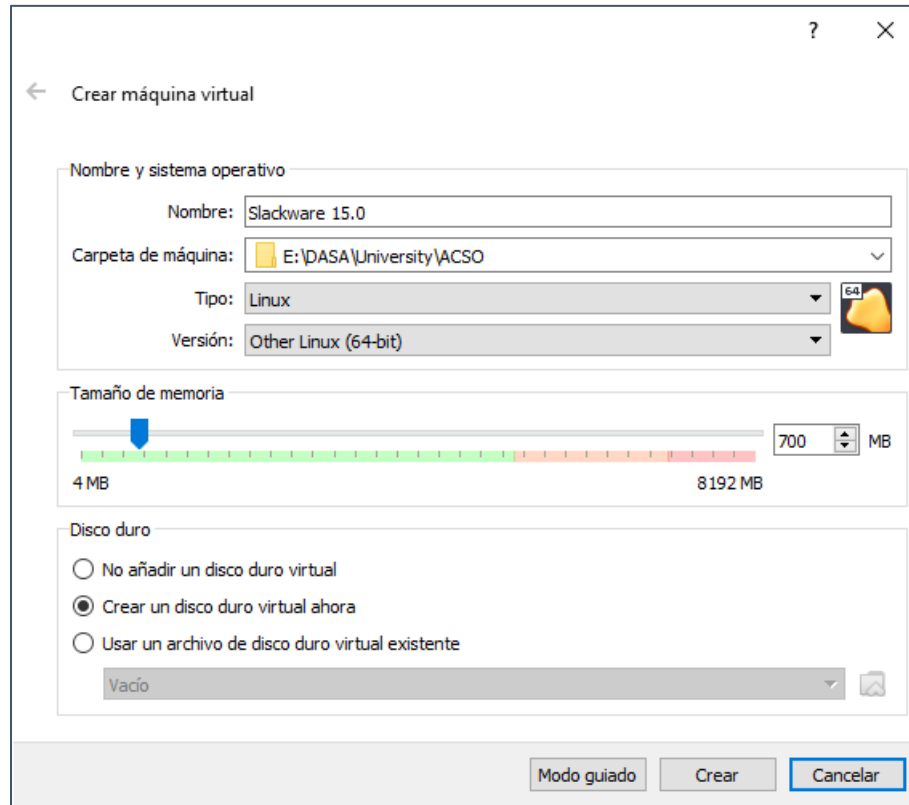


BITÁCORA DE INSTALACIÓN SLACKWARE 15.0

Configuramos la máquina virtual en Oracle VM VirtualBox con 700MB de memoria y 3.6 GB en disco.



Crear máquina virtual

Nombre y sistema operativo

Nombre: Slackware 15.0

Carpeta de máquina: E:\DASA\University\ACSO

Tipo: Linux

Versión: Other Linux (64-bit)

Tamaño de memoria

4 MB 8192 MB

700 MB

Disco duro

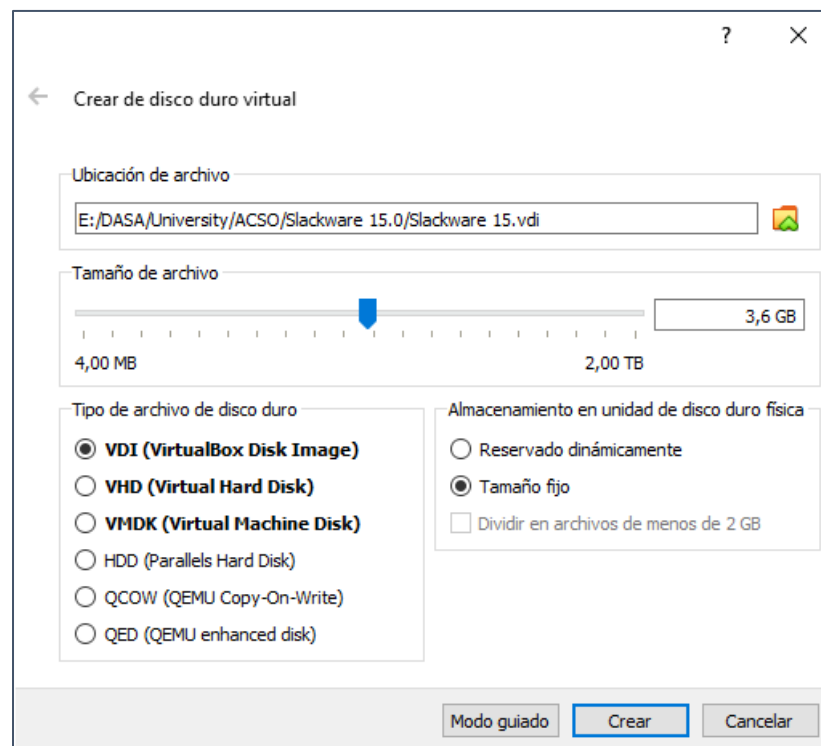
☐ No añadir un disco duro virtual

☒ Crear un disco duro virtual ahora

☐ Usar un archivo de disco duro virtual existente

Vacío

Modo guiado Crear Cancelar



Crear de disco duro virtual

Ubicación de archivo

E:\DASA\University\ACSO\Slackware 15.0\Slackware 15.vdi

Tamaño de archivo

4,00 MB 2,00 TB

3,6 GB

Tipo de archivo de disco duro

☒ VDI (VirtualBox Disk Image)

☐ VHD (Virtual Hard Disk)

☐ VMDK (Virtual Machine Disk)

☐ HDD (Parallels Hard Disk)

☐ QCOW (QEMU Copy-On-Write)

☐ QED (QEMU enhanced disk)

Almacenamiento en unidad de disco duro física

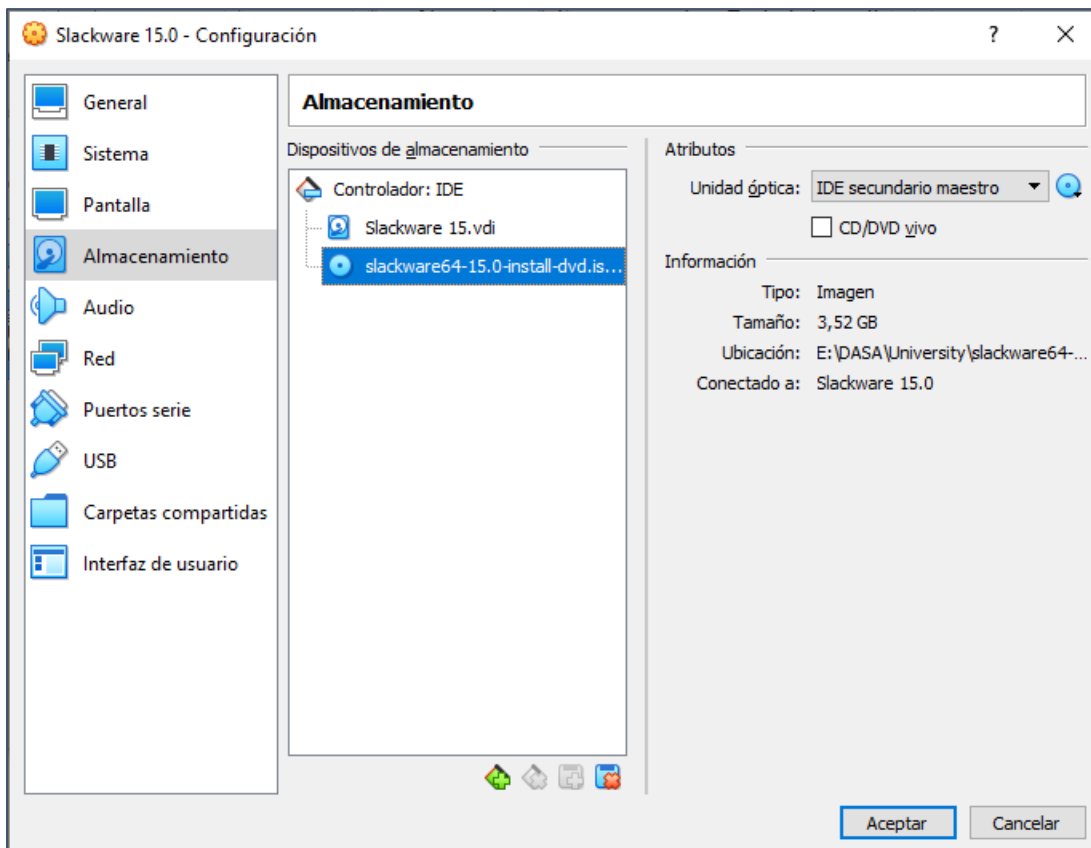
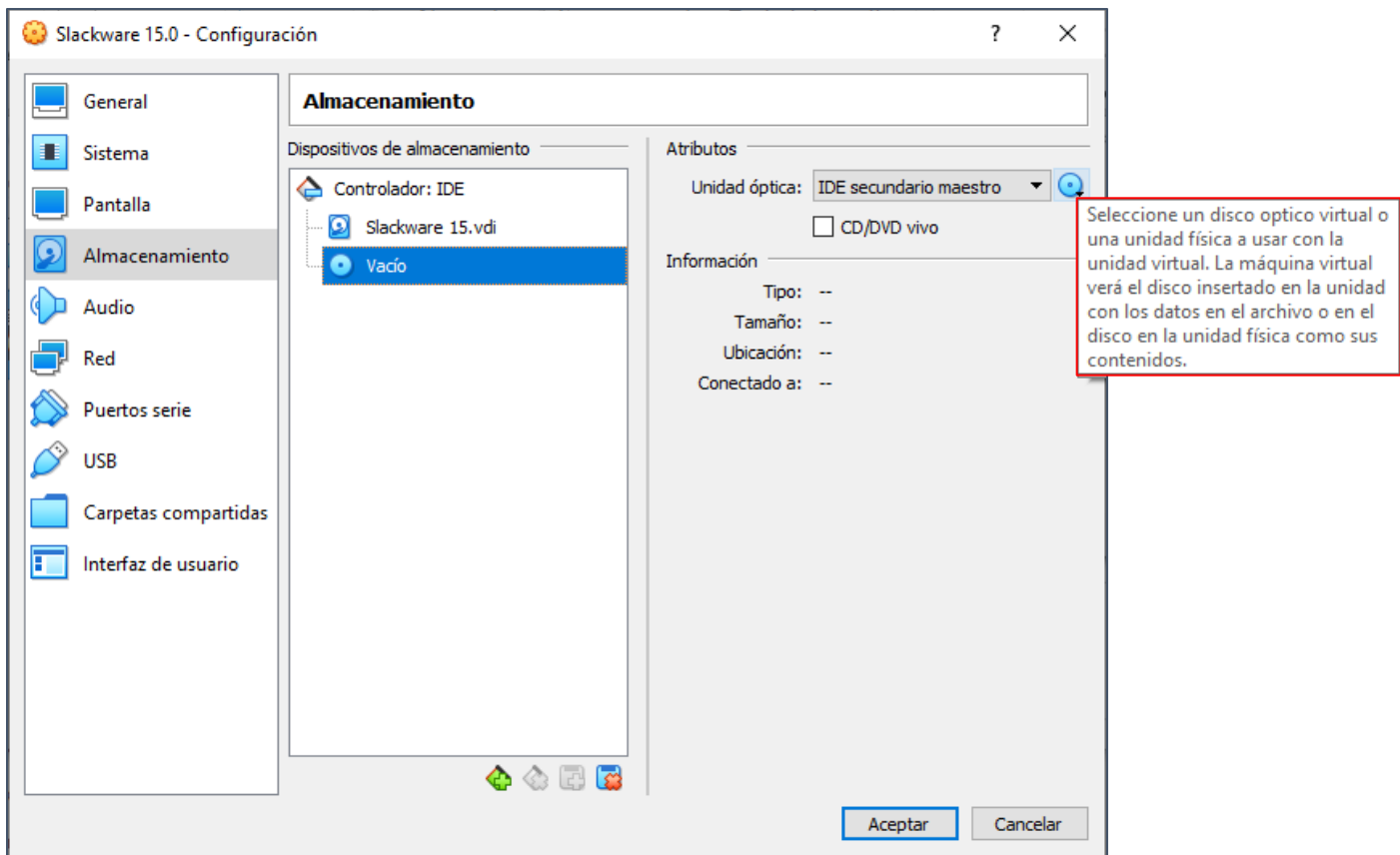
☐ Reservado dinámicamente

☒ Tamaño fijo

☐ Dividir en archivos de menos de 2 GB

Modo guiado Crear Cancelar

Después de crear la máquina virtual montaremos el disco de arranque en la máquina.



Iniciaremos la máquina virtual y pulsaremos ENTER.

```
ISOLINUX 4.07 2013-07-25 ETCD Copyright (C) 1994-2013 H. Peter Anvin et al

Welcome to Slackware64 version 15.0 (Linux kernel 5.15.19)!

If you need to pass extra parameters to the kernel, enter them at the prompt
below after the name of the kernel to boot (e.g., huge.s).

In a pinch, you can boot your system from here with a command like:

boot: huge.s root=/dev/sda1 initrd= ro

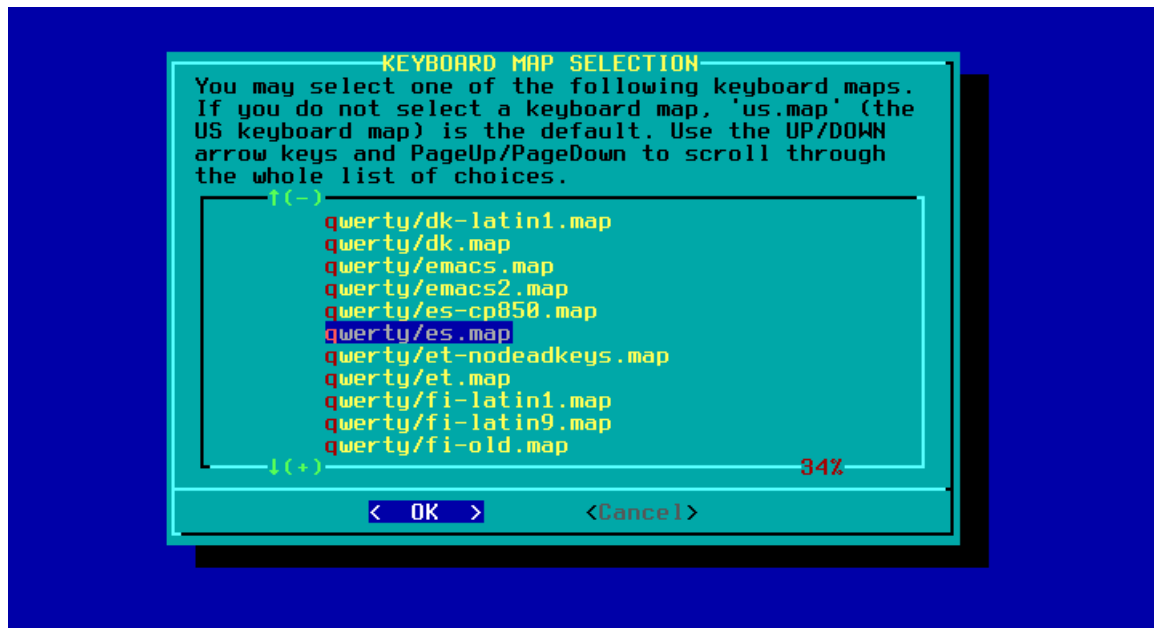
In the example above, /dev/sda1 is the / Linux partition.

To test your memory with memtest86+, enter memtest on the boot line below.

This prompt is just for entering extra parameters. If you don't need to enter
any parameters, hit ENTER to boot the default kernel "huge.s" or press [F2]
for a listing of more kernel choices. Default kernel will boot in 2 minutes.

boot: _
```

Elegiremos el idioma del teclado de preferencia QWERTY-ES / QWERTY-US.



Accederemos como usuario root para realizar las particiones del disco.

```
Welcome to the Slackware Linux installation disk! (version 15.0)

##### IMPORTANT! READ THE INFORMATION BELOW CAREFULLY. #####

- You will need one or more partitions of type 'Linux' prepared. It is also
  recommended that you create a swap partition (type 'Linux swap') prior
  to installation. For more information, run 'setup' and read the help file.

- If you're having problems that you think might be related to low memory, you
  can try activating a swap partition before you run setup. After making a
  swap partition (type 82) with cfdisk or fdisk, activate it like this:
    mkswap /dev/<partition> ; swapon /dev/<partition>

- Once you have prepared the disk partitions for Linux, type 'setup' to begin
  the installation process.

You may now login as 'root'.

slackware login: root
```

Luego de acceder como usuario root realizaremos particiones del disco con el comando cfdisk o fdisk.

```

                                     Select label type
                                     gpt
                                     dos
                                     sgi
                                     sun

Device does not contain a recognized partition table.
Select a type to create a new label, press 'L' to load script file, 'Q' quits.
```

Tomaremos la etiqueta dos y crearemos 2 particiones, cada una con 1.56 GB, una del tipo Linux Swap y el otro tipo Linux con arranque, y escribiremos los cambios de las particiones.

```

Disk: /dev/sda
Size: 3.6 GiB, 3865470464 bytes, 7549747 sectors
Label: dos, identifier: 0x28e7e4c3

Device      Boot      Start      End  Sectors  Size  Id Type
/dev/sda1    *          2048   3278847  3276800   1.6G  83 Linux
/dev/sda2          3278848  6555647  3276800   1.6G  82 Linux swap
>> Free space      6555648  7549746   994099  485.4M

[ New ] [ Quit ] [ Help ] [ Write ] [ Dump ]

Create new partition from free space
```

Para comenzar con la instalación de Slackware escribiremos setup.

```

Label: dos, identifier: 0x28e7e4c3

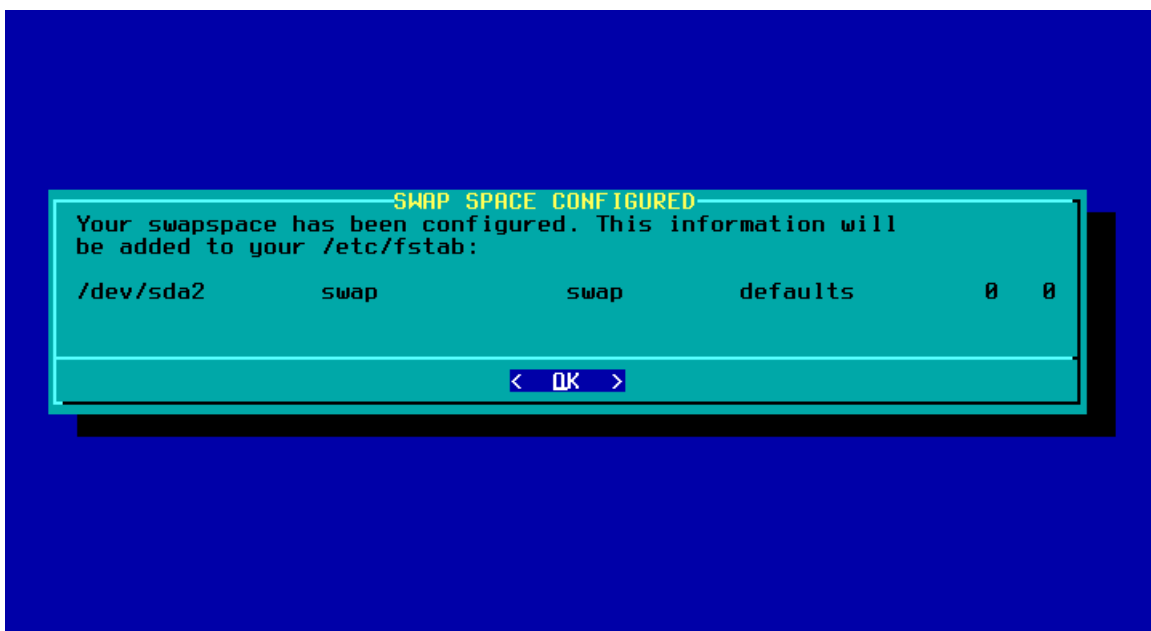
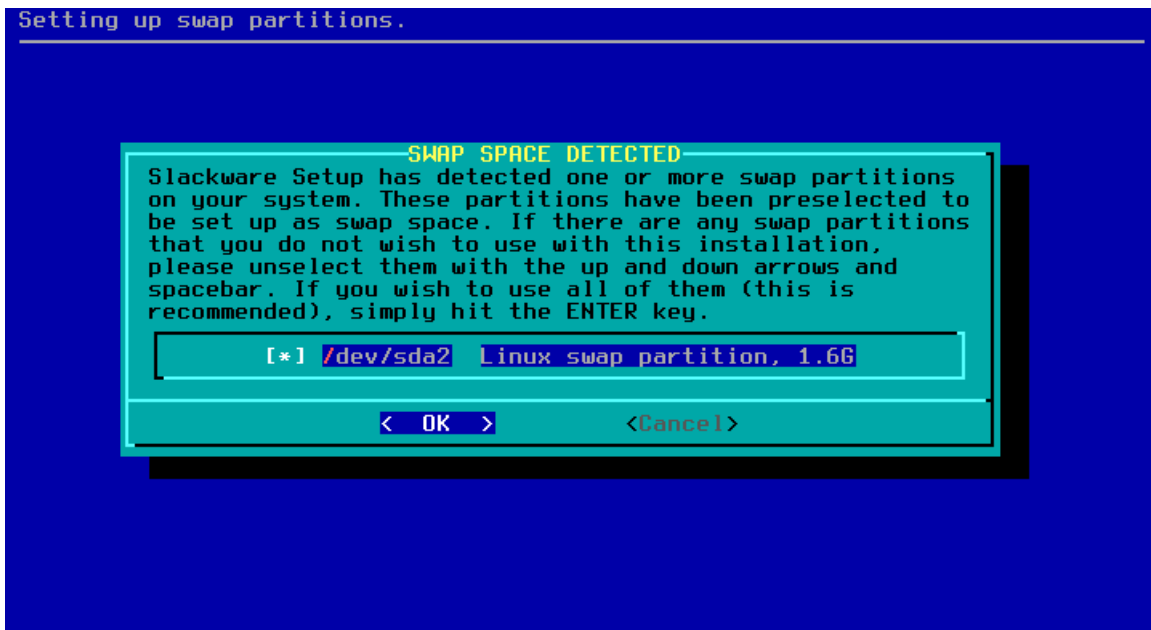
Device      Boot      Start      End  Sectors  Size  Id Type
/dev/sda1    *          2048   3278847  3276800   1.6G  83 Linux
/dev/sda2          3278848  6555647  3276800   1.6G  82 Linux swap
>> Free space      6555648  7549746   994099  485.4M

[ New ] [ Quit ] [ Help ] [ Write ] [ Dump ]

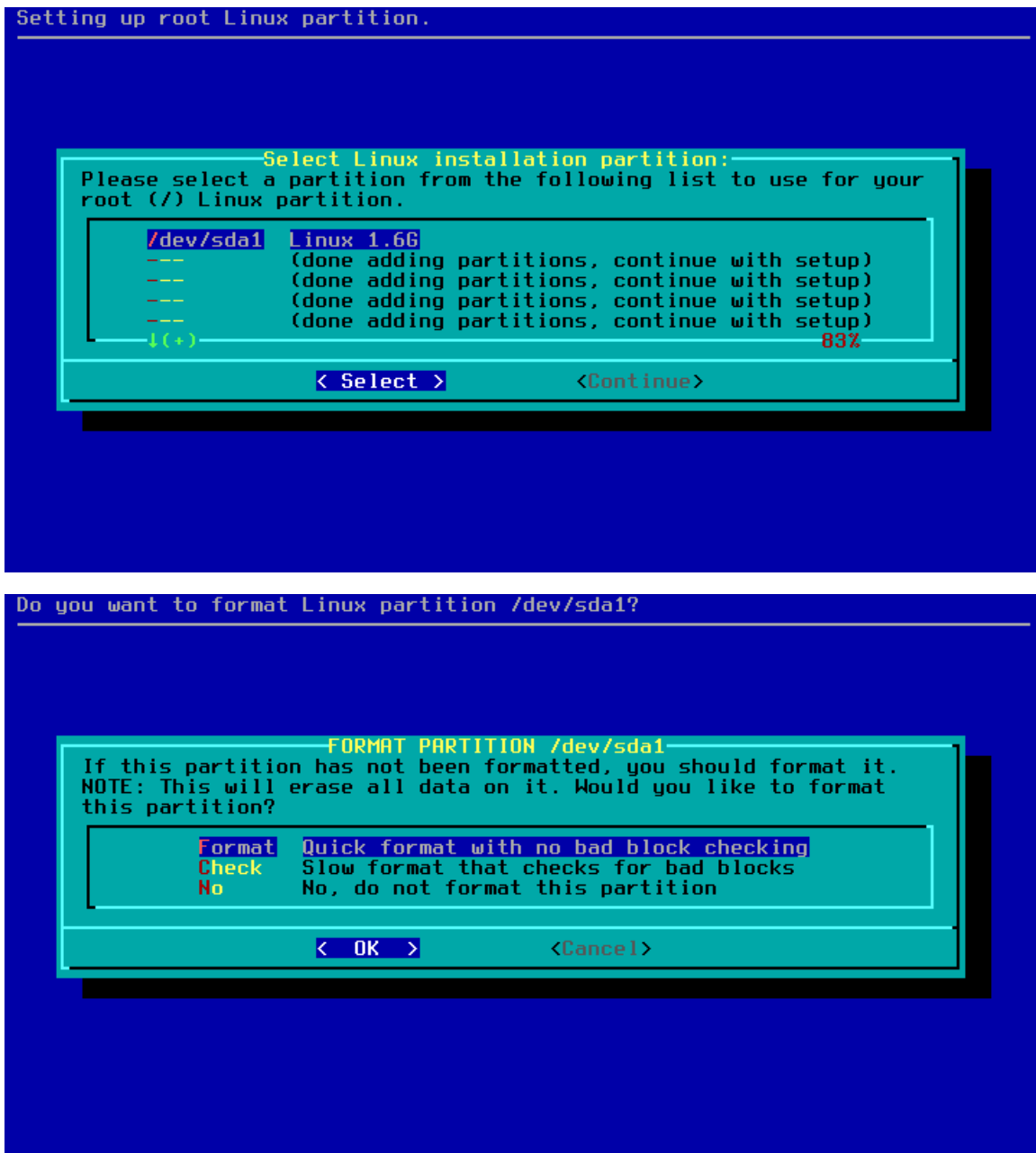
Quit program without writing changes

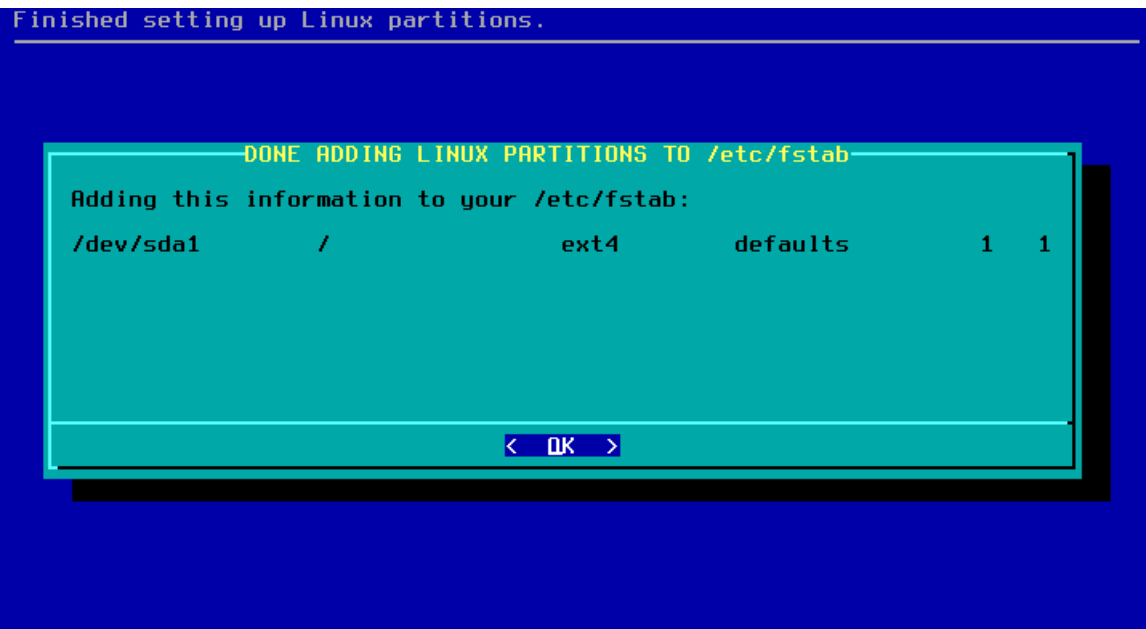
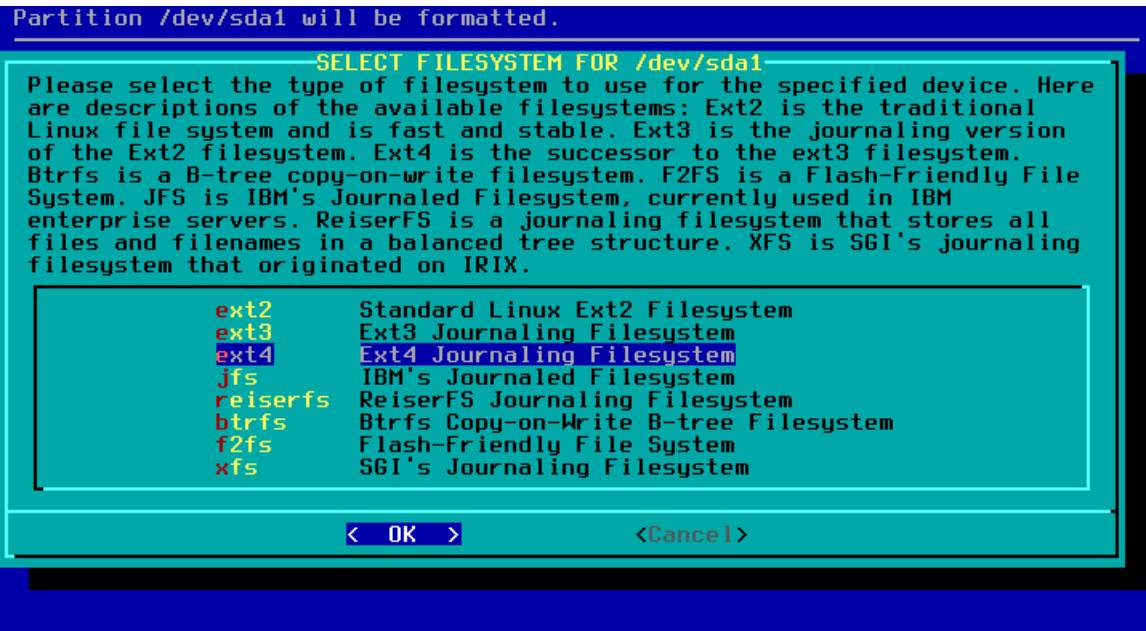
Syncing disks.
root@slackware:/# setup
```

Configuraremos la partición swap en ADDSWAP, y nos identificará la partición creada anteriormente.

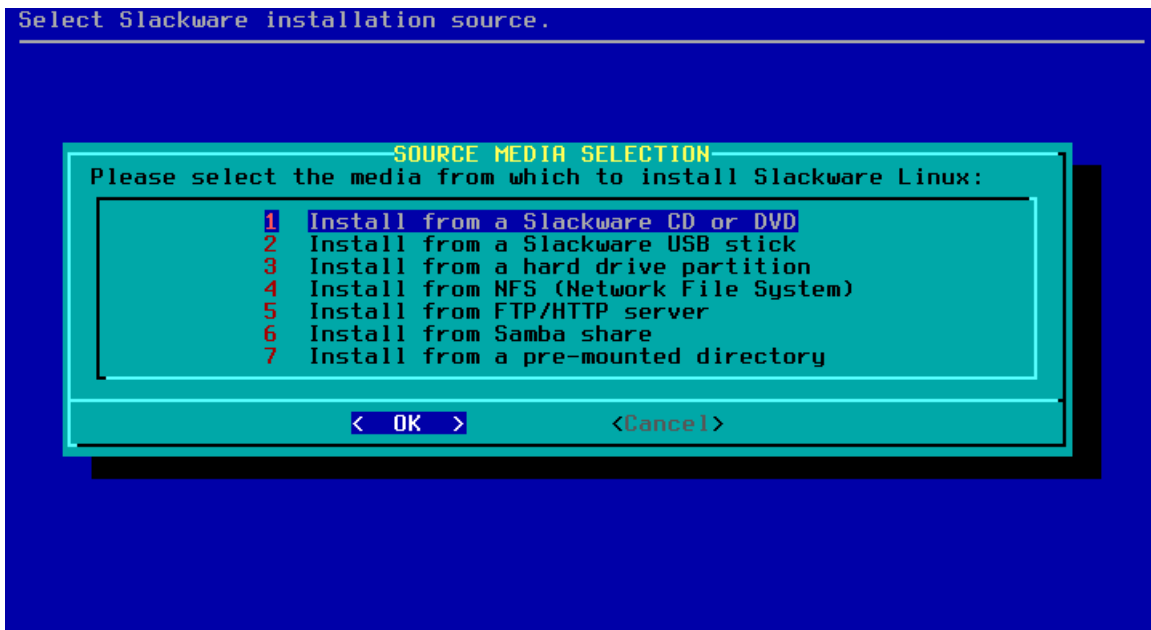


Elegiremos la partición creada y la formatearemos con formato ext4.

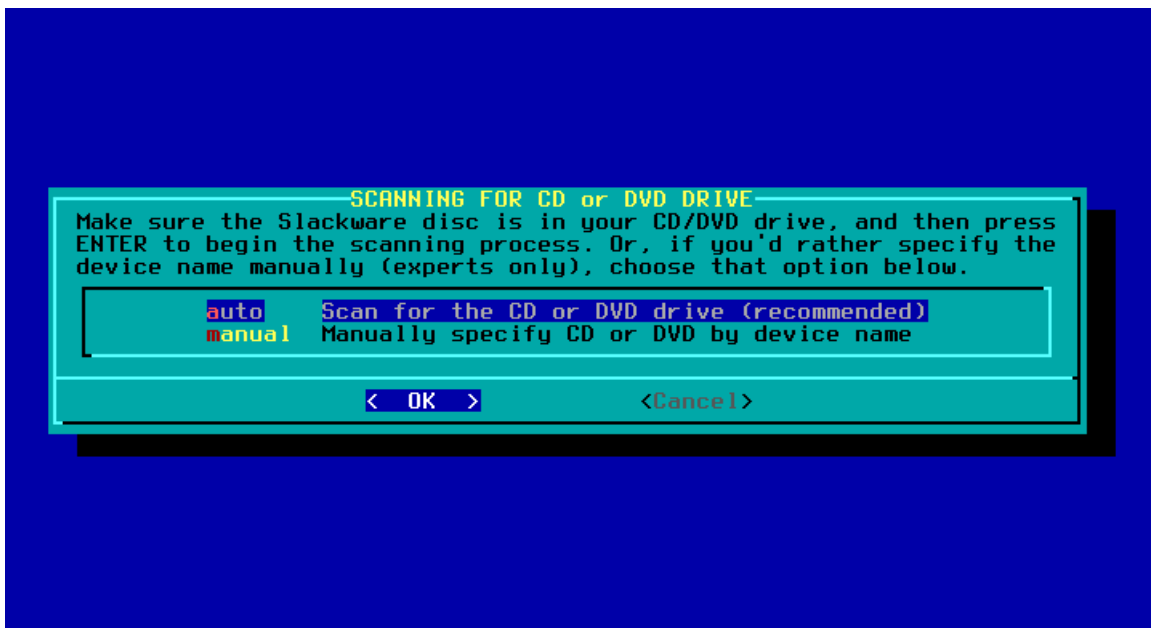




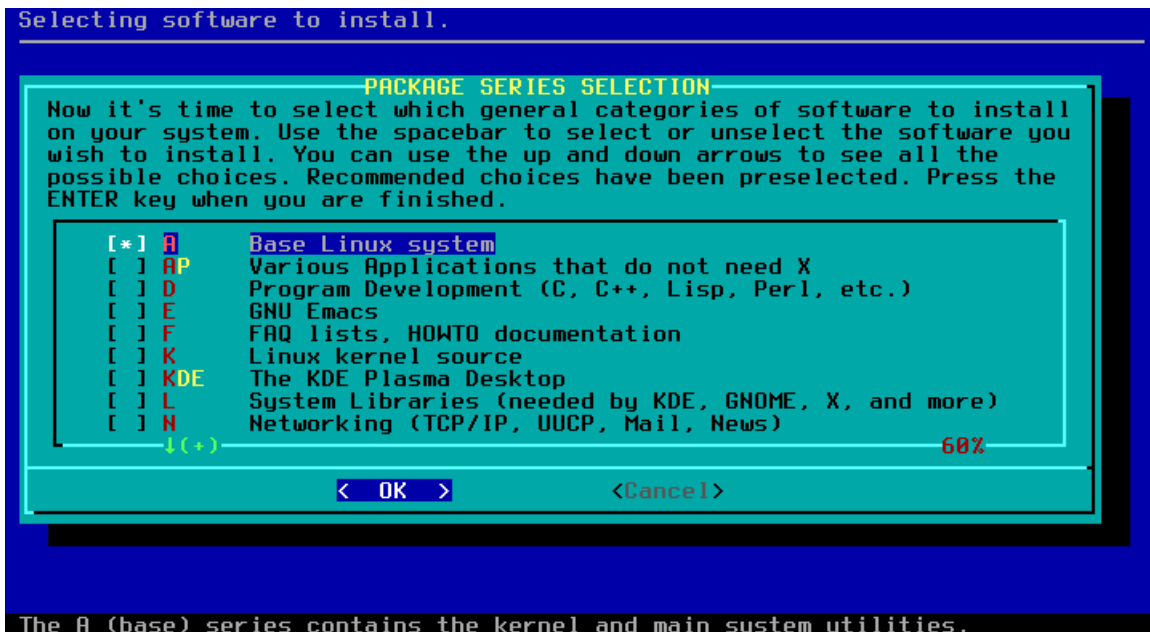
Para instalar Slackware elegiremos la fuente CD o DVD donde montamos la imagen iso de Slackware.



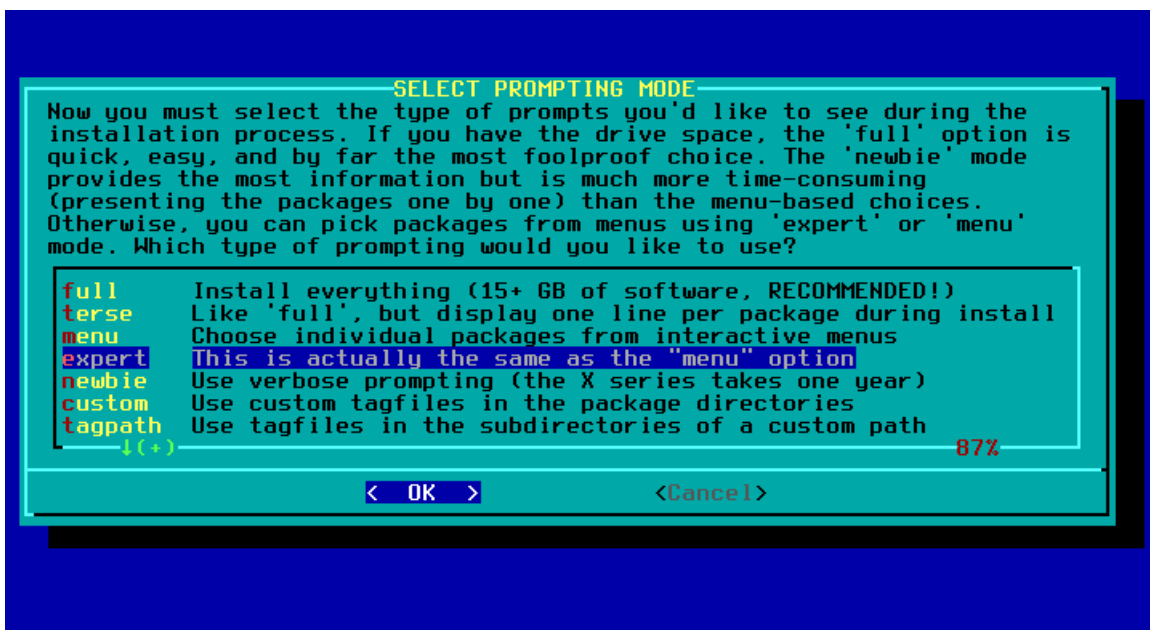
Dejaremos que detecte la unidad de CD automáticamente.



Instalaremos únicamente la base para que Slackware funcione por lo que tomaremos el paquete A.



Seleccionamos el modo EXPERT para escoger los paquetes a instalar

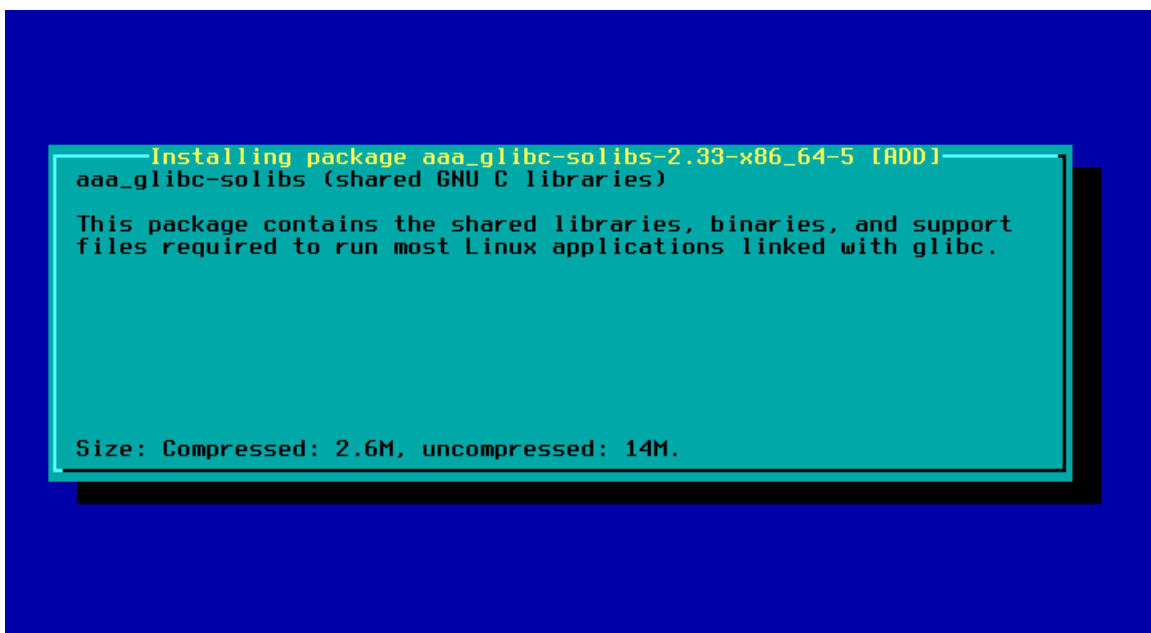


Luego tomaremos los paquetes que dicen REQUIRED y adicionalmente.

- aaa_terminfo
- dialog
- aaa_glibc-solibs
- elvis
- lilo
- kernel-huge
- syskgold
- syslunix



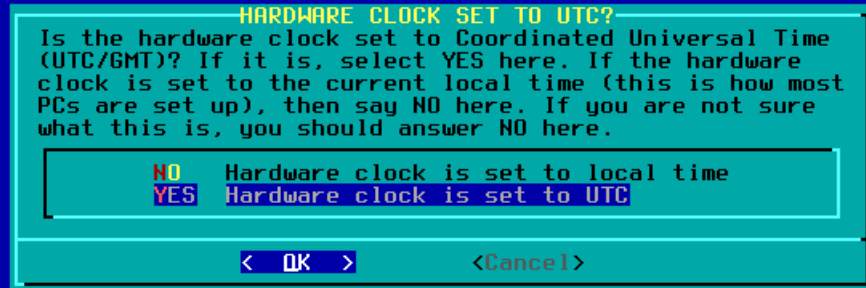
Se instalarán los paquetes seleccionados.



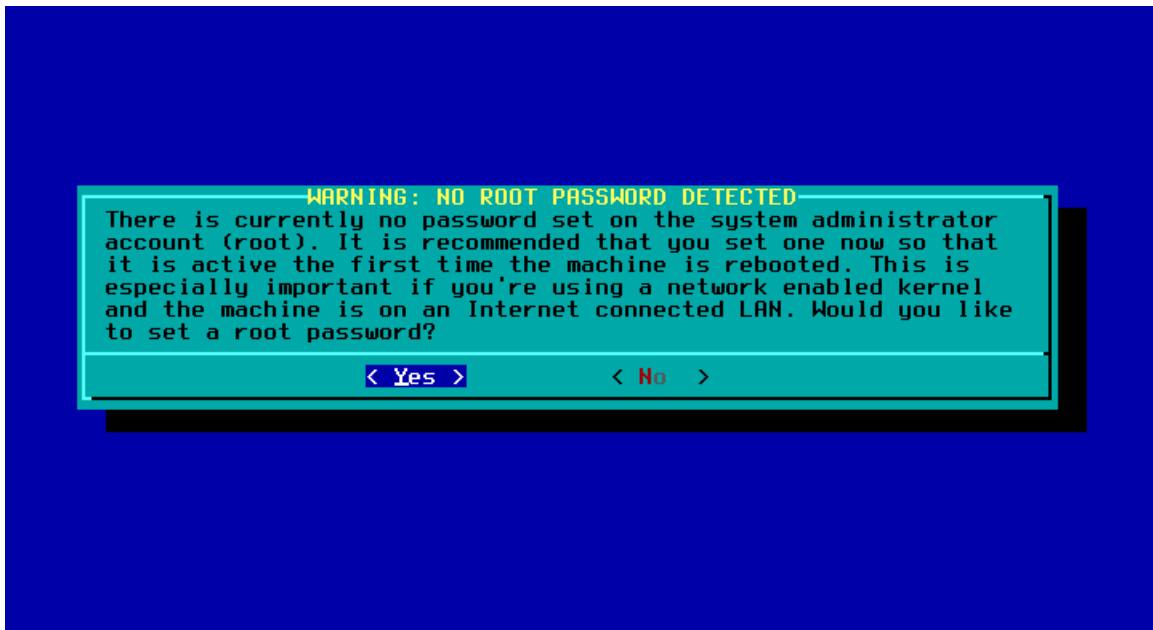
Seguiremos las instrucciones para instalar LILO.



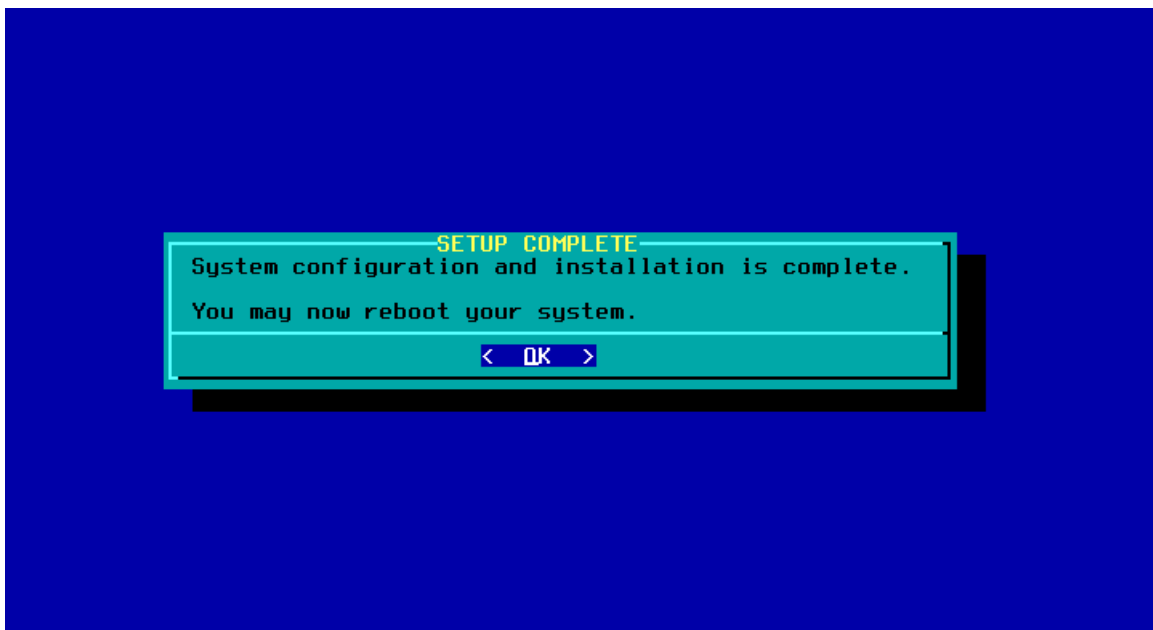
Configuramos la hora



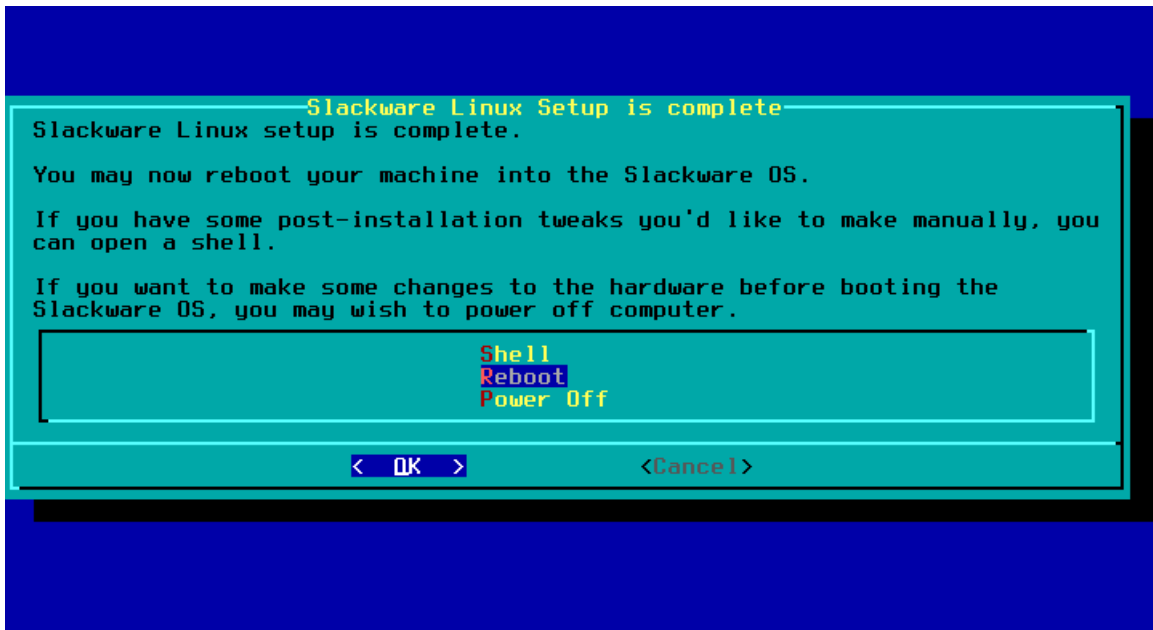
Configuraremos una contraseña para el usuario root, teniendo en cuenta que sea mayor a 6 caracteres.



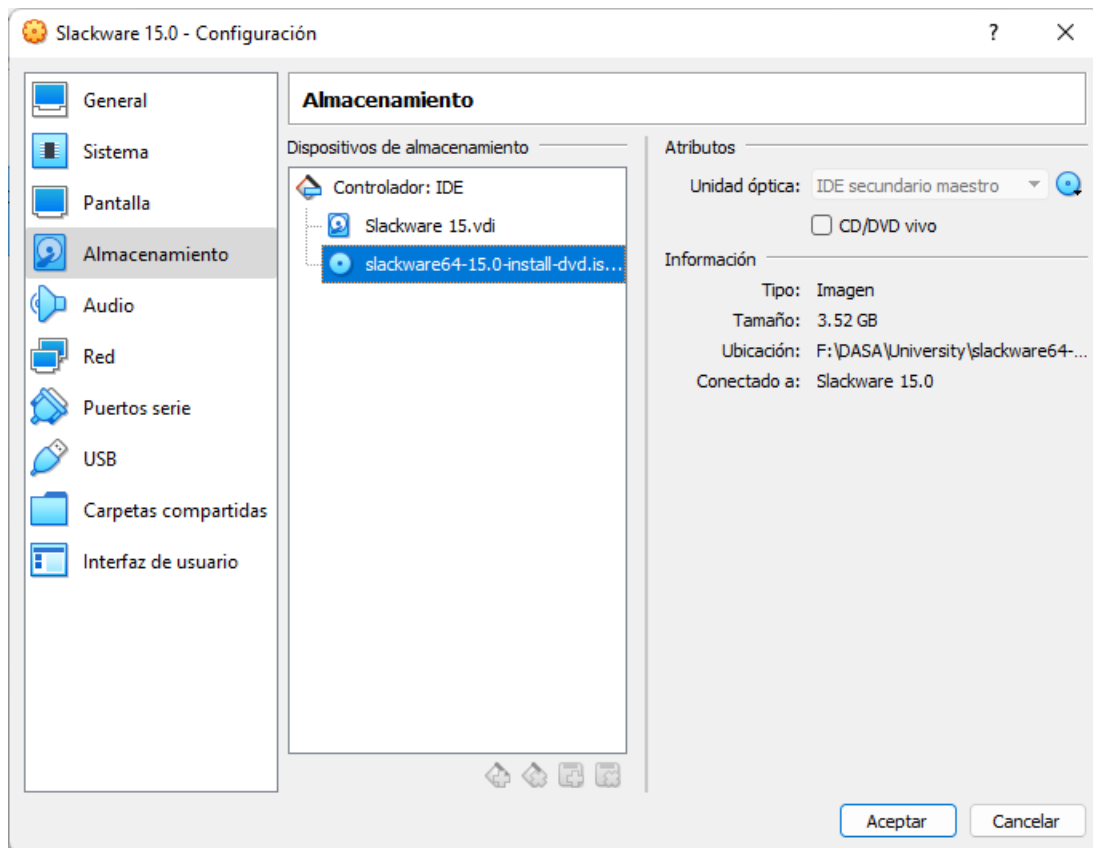
Terminado esto, quedara lista la instalación.



Salimos del instalador y reiniciamos el sistema.



Para configurar la tarjeta de red a la máquina virtual instalaremos paquetes montando la imagen de nuevo en el lector de discos



Iniciamos sesión con el usuario root y su respectiva contraseña

```
Welcome to Linux 5.15.19 x86_64 (tty1)

darkstar login: root
Password:
Last login: Wed Aug 17 10:51:30 on tty1
Linux 5.15.19.
root@darkstar:~#
```

Montaremos la imagen iso con el comando `mount /dev/sr0 /mnt/cdrom`

```
root@darkstar:~# mount /dev/sr0 /mnt/cdrom
mount: /mnt/cdrom: WARNING: source write-protected, mounted read-only.
```

Consultaremos la lista de paquetes del paquete N con el comando `ls /mnt/cdrom/slackware64/n/n*.txz`


```
root@darkstar:/# ls /mnt/cdrom/slackware64/n/n*.txz
/mnt/cdrom/slackware64/n/nc-1.10-x86_64-4.txz
/mnt/cdrom/slackware64/n/ncftp-3.2.6-x86_64-4.txz
/mnt/cdrom/slackware64/n/net-snmp-5.9.1-x86_64-4.txz
/mnt/cdrom/slackware64/n/net-tools-20181103_0eebece-x86_64-3.txz
/mnt/cdrom/slackware64/n/netatalk-3.1.12-x86_64-7.txz
/mnt/cdrom/slackware64/n/netdate-bsd4-x86_64-4.txz
/mnt/cdrom/slackware64/n/netkit-bootparamd-0.17-x86_64-6.txz
/mnt/cdrom/slackware64/n/netkit-ftp-0.17-x86_64-7.txz
/mnt/cdrom/slackware64/n/netkit-ntalk-0.17-x86_64-7.txz
/mnt/cdrom/slackware64/n/netkit-routed-0.17-x86_64-4.txz
/mnt/cdrom/slackware64/n/netkit-rsh-0.17-x86_64-5.txz
/mnt/cdrom/slackware64/n/netkit-rusers-0.17-x86_64-5.txz
/mnt/cdrom/slackware64/n/netkit-rwall-0.17-x86_64-5.txz
/mnt/cdrom/slackware64/n/netkit-rwho-0.17-x86_64-5.txz
/mnt/cdrom/slackware64/n/netkit-timed-0.17-x86_64-4.txz
/mnt/cdrom/slackware64/n/netpipes-4.2-x86_64-4.txz
/mnt/cdrom/slackware64/n/nettle-3.7.3-x86_64-1.txz
/mnt/cdrom/slackware64/n/netwatch-1.3.1_2-x86_64-5.txz
/mnt/cdrom/slackware64/n/network-scripts-15.0-noarch-18.txz
/mnt/cdrom/slackware64/n/netwrite-0.17-x86_64-4.txz
/mnt/cdrom/slackware64/n/newspost-2.1.1-x86_64-4.txz
/mnt/cdrom/slackware64/n/nfacct-1.0.2-x86_64-4.txz
/mnt/cdrom/slackware64/n/nfs-utils-2.5.4-x86_64-1.txz
/mnt/cdrom/slackware64/n/nftables-1.0.1-x86_64-1.txz
/mnt/cdrom/slackware64/n/nghttp2-1.46.0-x86_64-1.txz
/mnt/cdrom/slackware64/n/nmap-7.92-x86_64-1.txz
/mnt/cdrom/slackware64/n/nm-6.7.3-x86_64-8.txz
/mnt/cdrom/slackware64/n/npth-1.6-x86_64-3.txz
/mnt/cdrom/slackware64/n/nss-pam-ldapd-0.9.12-x86_64-1.txz
/mnt/cdrom/slackware64/n/ntp-4.2.8p15-x86_64-8.txz
```

Se instalan los paquetes:

```
root@darkstar:/# installpkg /mnt/cdrom/slackware64/n/network-scripts-15.0-noarch-18.txz
Verifying package network-scripts-15.0-noarch-18.txz.
Installing package network-scripts-15.0-noarch-18.txz [ADD]:
PACKAGE DESCRIPTION:
# network-scripts (Scripts to configure a network)
#
# These are the basic scripts and files used to define a network and
# configure network interfaces on Linux. Most of the original
# /etc files were written by Fred N. van Kempen, or borrowed from BSD.
# The rc.inet1 and rc.inet2 scripts were mostly written by Patrick
# Volkerding, with suggestions and fixes from hundreds of contributors
# over the years.
#
Executing install script for network-scripts-15.0-noarch-18.txz.
Package network-scripts-15.0-noarch-18.txz installed.
```

```
root@darkstar:/# installpkg /mnt/cdrom/slackware64/n/iputils-20211215-x86_64-1.txz
Verifying package iputils-20211215-x86_64-1.txz.
Installing package iputils-20211215-x86_64-1.txz [ADD]:
PACKAGE DESCRIPTION:
# iputils (a collection of common network tools)
#
# The iputils package contains network tools found on nearly all *NIX
# systems, along with an extra or two. Some of the utilities found
# here include arping, clockdiff, ping, ping6, rarpd, rdisc, tracepath,
# and tracepath6.
#
# iputils is maintained by YOSHIFUJI Hideaki.
#
Executing install script for iputils-20211215-x86_64-1.txz.
Package iputils-20211215-x86_64-1.txz installed.
```

```
root@darkstar:~# installpkg /mnt/cdrom/slackware64/a/kbd-1.15.3-x86_64-6.txz
Verifying package kbd-1.15.3-x86_64-6.txz.
Installing package kbd-1.15.3-x86_64-6.txz [REC]:
PACKAGE DESCRIPTION:
# kbd (keyboard maps and console fonts)
#
# Load and save keyboard mappings. Needed if you are not using the US
# keyboard map. This package also contains utilities to change your
# console fonts - if you install it you'll get a menu later on that lets
# you select from many different fonts. If you like one, you can make
# it your default font. A new default font can be chosen at any time by
# typing 'setconsolefont'.
#
Executing install script for kbd-1.15.3-x86_64-6.txz.
Package kbd-1.15.3-x86_64-6.txz installed.
```

```
root@darkstar:~# installpkg /mnt/cdrom/slackware64/n/net-tools-20181103_0eebece-x86_64-3.txz
Verifying package net-tools-20181103_0eebece-x86_64-3.txz.
Installing package net-tools-20181103_0eebece-x86_64-3.txz [ADD]:
PACKAGE DESCRIPTION:
# net-tools (Linux networking utilities)
#
# This is a collection of traditional tools such as "ifconfig" and
# "route" that were used to configure networking on Linux. While you can
# still make use of these tools today, they have been largely superseded
# by newer tools such as "ip", "ifrename", and "ethtool".
#
# The net-tools package was maintained for many years by Phil Blundell
# and Bernd Eckenfels.
#
Package net-tools-20181103_0eebece-x86_64-3.txz installed.
```

```
root@daniel:~# installpkg /mnt/cdrom/slackware64/l/libunistring-0.9.10-x86_64-3.txz
Verifying package libunistring-0.9.10-x86_64-3.txz.
Installing package libunistring-0.9.10-x86_64-3.txz [REC]:
PACKAGE DESCRIPTION:
# libunistring (GNU Unicode string library)
#
# This library provides functions for manipulating Unicode strings and
# for manipulating C strings according to the Unicode standard.
#
# Homepage: http://www.gnu.org/s/libunistring
#
Executing install script for libunistring-0.9.10-x86_64-3.txz.
Package libunistring-0.9.10-x86_64-3.txz installed.
```

Se reinicia la máquina para efectuar los cambios

```
root@darkstar:~# reboot

root@darkstar:~# Broadcast message from root@darkstar.example.net (tty1) (Thu Aug 18 17:22:53 2022):

The system is going down for reboot NOW!
```

Para configurar la red luego de instalar los paquetes entraremos como usuario root y ejecutaremos el comando netconfig

```
Welcome to Linux 5.15.19 x86_64 (tty1)

darkstar login: root
Password:
Last failed login: Fri Aug 19 08:55:15 -05 2022 on tty1
There was 1 failed login attempt since the last successful login.
Last login: Thu Aug 18 19:44:32 on tty1
Linux 5.15.19.
root@darkstar:~# netconfig
```



ENTER HOSTNAME

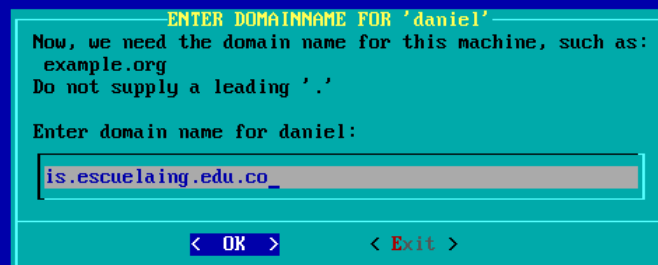
First, we'll need the name you'd like to give your host.
Only the base hostname is needed right now - not the domain.
For example: darkstar

Enter hostname:

daniel

< OK > < Exit >

Agregamos el dominio



ENTER DOMAINNAME FOR 'daniel'

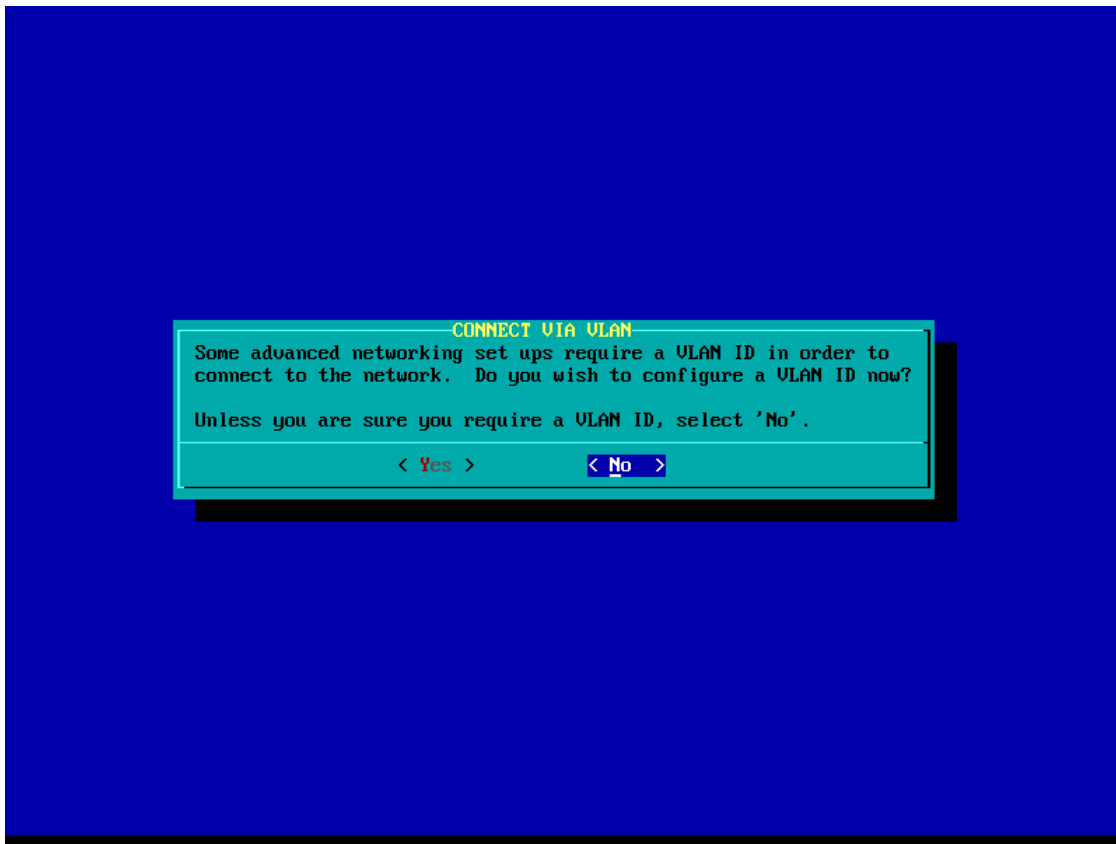
Now, we need the domain name for this machine, such as:
example.org
Do not supply a leading '.'

Enter domain name for daniel:

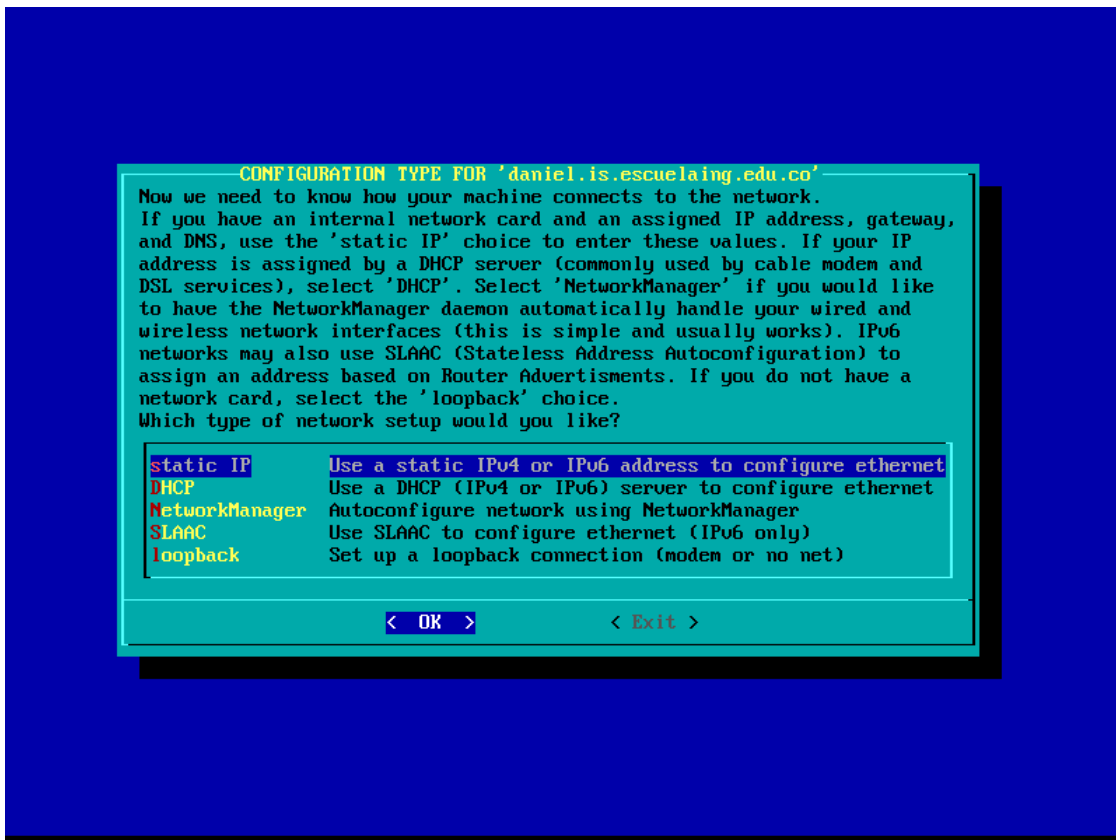
is.escuelaing.edu.co_

< OK > < Exit >

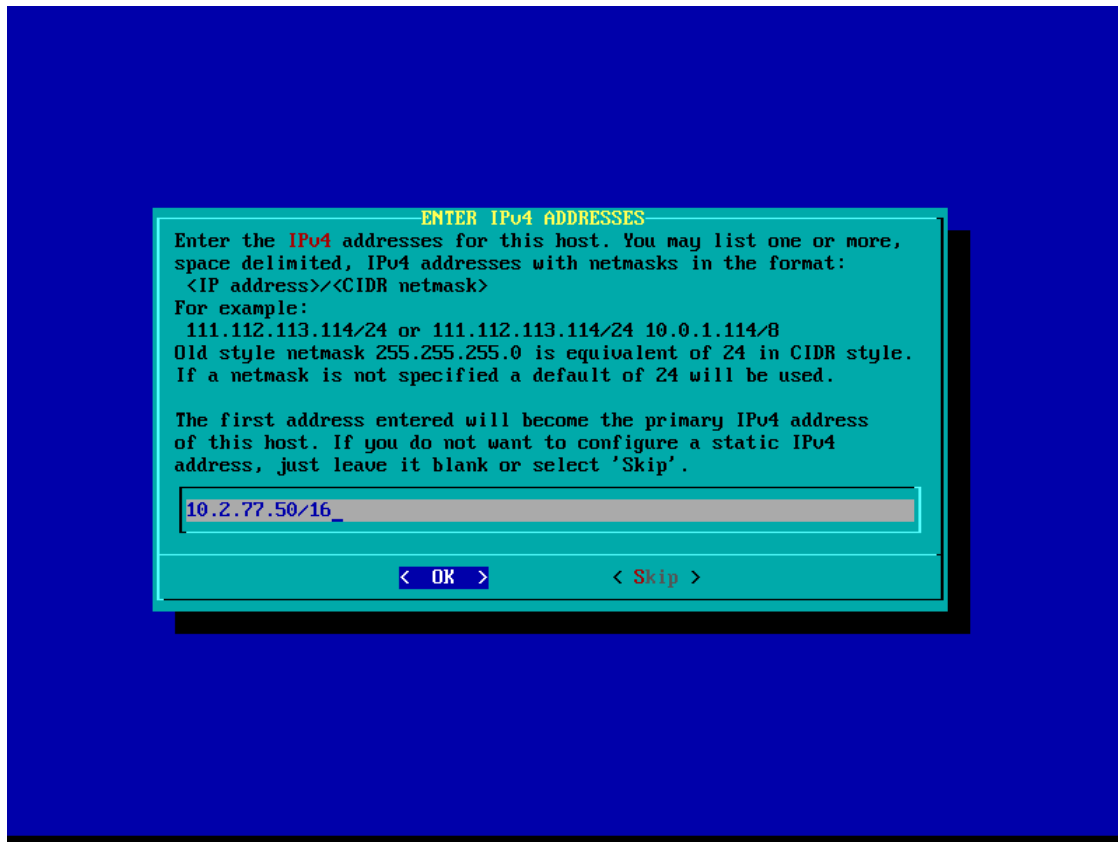
No usamos opción VLAN



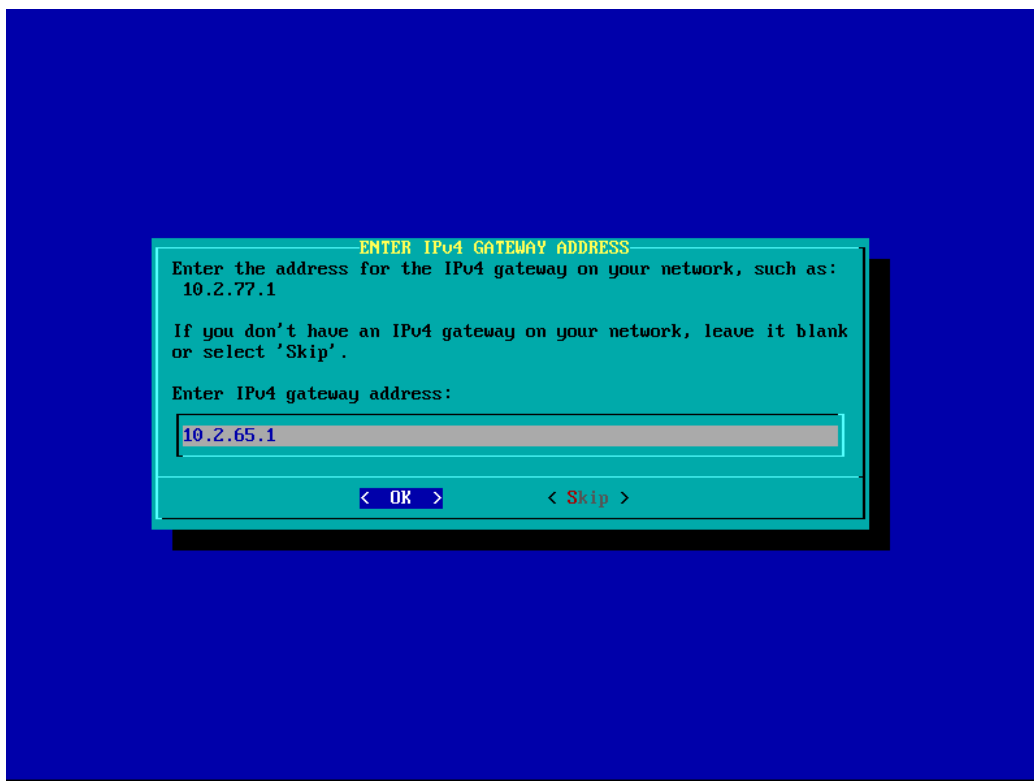
Configuraremos la dirección IP



Usaremos la dirección IP 10.2.77.X donde usaremos el numero del quipo del laboratorio (50) y para la máscara en CIDR (/16) equivalente a 255.255.0.0



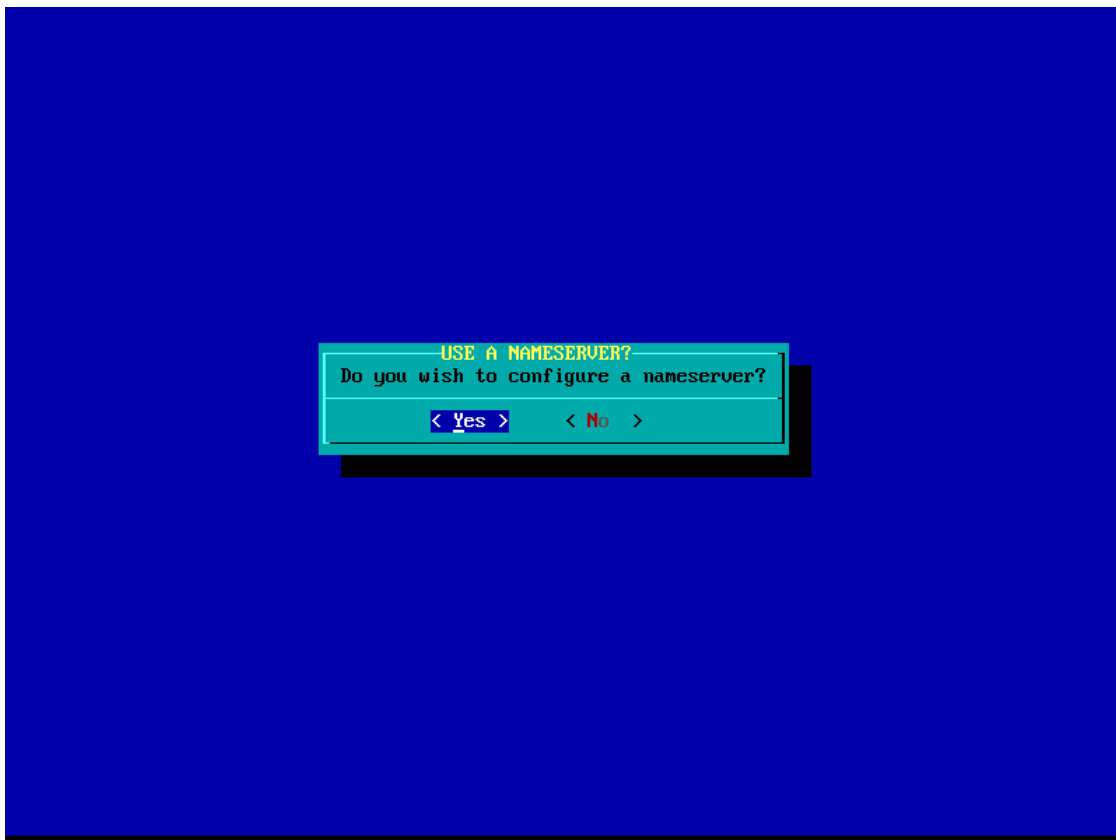
Configuraremos el Gateway 10.2.65.1

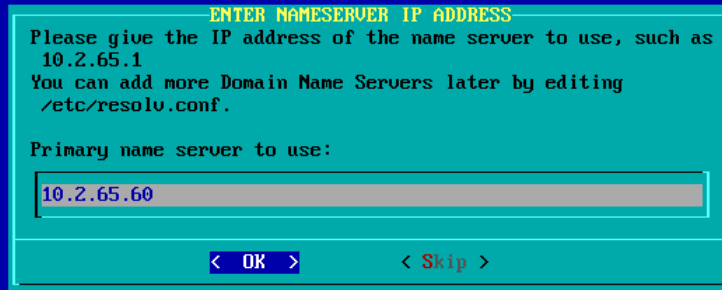


No configuraremos dirección IPv6



Configuraremos el DNS en 10.2.65.60





ENTER NAMESERVER IP ADDRESS

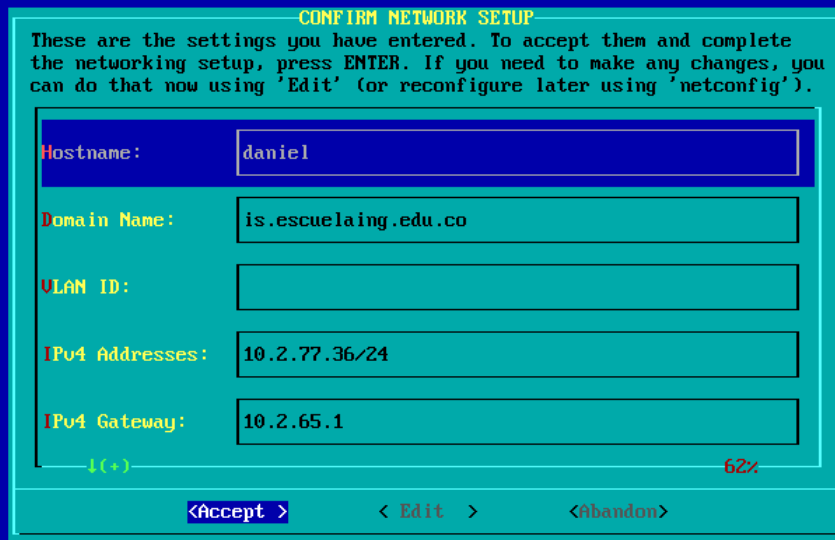
Please give the IP address of the name server to use, such as 10.2.65.1
You can add more Domain Name Servers later by editing /etc/resolv.conf.

Primary name server to use:

10.2.65.60

< OK > < Skip >

Para luego tener un resumen de red



CONFIRM NETWORK SETUP

These are the settings you have entered. To accept them and complete the networking setup, press ENTER. If you need to make any changes, you can do that now using 'Edit' (or reconfigure later using 'netconfig').

Hostname: daniel

Domain Name: is.escuelaing.edu.co

VLAN ID:

IPv4 Addresses: 10.2.77.36/24

IPv4 Gateway: 10.2.65.1

1(+)

62%

<Accept > < Edit > <Abandon>

En caso de que no se configure la máscara y el Gateway usaremos los comandos:

- `ifconfig eth1 <address> netmask <mask>`
- `route add default gw <Gateway>`

```
root@darkstar:/mnt/cdrom/slackware64/n# ifconfig eth1 10.2.77.36 netmask 255.255.0.0
[ 3855.075872] e1000: eth1 NIC Link is Up 1000 Mbps Full Duplex, Flow Control: RX
[ 3855.099869] IPv6: ADDRCONF(NETDEV_CHANGE): eth1: link becomes ready
```

Luego procedemos a realizar pruebas de conexión:

- `ping 10.2.65.1`
- `ping 8.8.8.8`

```
root@daniel:~# ping 10.2.65.1
PING 10.2.65.1 (10.2.65.1) 56(84) bytes of data.
64 bytes from 10.2.65.1: icmp_seq=1 ttl=64 time=1.45 ms
64 bytes from 10.2.65.1: icmp_seq=2 ttl=64 time=1.38 ms
64 bytes from 10.2.65.1: icmp_seq=3 ttl=64 time=0.889 ms
64 bytes from 10.2.65.1: icmp_seq=4 ttl=64 time=0.818 ms
64 bytes from 10.2.65.1: icmp_seq=5 ttl=64 time=1.28 ms
64 bytes from 10.2.65.1: icmp_seq=6 ttl=64 time=0.812 ms
64 bytes from 10.2.65.1: icmp_seq=7 ttl=64 time=0.923 ms
64 bytes from 10.2.65.1: icmp_seq=8 ttl=64 time=1.23 ms
64 bytes from 10.2.65.1: icmp_seq=9 ttl=64 time=0.887 ms
64 bytes from 10.2.65.1: icmp_seq=10 ttl=64 time=0.792 ms
64 bytes from 10.2.65.1: icmp_seq=11 ttl=64 time=1.30 ms
64 bytes from 10.2.65.1: icmp_seq=12 ttl=64 time=0.948 ms
64 bytes from 10.2.65.1: icmp_seq=13 ttl=64 time=0.920 ms
64 bytes from 10.2.65.1: icmp_seq=14 ttl=64 time=0.922 ms
^C
--- 10.2.65.1 ping statistics ---
14 packets transmitted, 14 received, 0% packet loss, time 13015ms
rtt min/avg/max/mdev = 0.792/1.038/1.446/0.223 ms
root@daniel:~#
```

```
root@daniel:~# ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=109 time=43.3 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=109 time=44.5 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=109 time=42.5 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=109 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=109 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=109 time=42.3 ms
64 bytes from 8.8.8.8: icmp_seq=7 ttl=109 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=109 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=9 ttl=109 time=43.1 ms
64 bytes from 8.8.8.8: icmp_seq=10 ttl=109 time=46.4 ms
64 bytes from 8.8.8.8: icmp_seq=11 ttl=109 time=42.3 ms
64 bytes from 8.8.8.8: icmp_seq=12 ttl=109 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=13 ttl=109 time=43.5 ms
64 bytes from 8.8.8.8: icmp_seq=14 ttl=109 time=51.8 ms
^C
--- 8.8.8.8 ping statistics ---
14 packets transmitted, 14 received, 0% packet loss, time 13017ms
rtt min/avg/max/mdev = 42.313/43.693/51.782/2.496 ms
```