

Instalación de Servidor Linux con CentOS

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Instalación de CentOS 5.2 parte I

Arrancar có CD-ROM ou DVD do CentOS e presionar ENTER cando aparezca o prompt:



Pode levar un pouco o testear o medio onde está o CentOS polo que saltaremos esa opción:

Welcome to CentOS



<Tab>/<Alt-Tab> between elements | <Space> selects | <F12> next screen

A pantalla de benvida do instalador aparecerá, pulsamos en Next:

CentOS 5



CentOS 5

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A continuación escollemos o lenguaxe:

CentOS 5



What language would you like to use during the installation process?

Chinese(Simplified) (简体中文)

Chinese(Traditional) (繁體中文)

Croatian (Hrvatski)

Czech (Čeština)

Danish (Dansk)

Dutch (Nederlands)

English (English)

Estonian (eesti keel)

Finnish (suomi)

French (Français)

German (Deutsch)

Greek (Ελληνικά)

Gujarati (ગુજરાતી)

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Seleccionamos o tipo de teclado:

 Select the appropriate keyboard for the system.

- French (latin9)
- French (pc)
- French Canadian
- German**
- German (latin1 w/ no deadkeys)
- German (latin1)
- Greek
- Gujarati (Inscript)
- Hungarian
- Hungarian (101 key)
- Icelandic
- Italian
- Italian (IBM)
- Italian (it2)

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- German (latin1)
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- Hungarian
- Hungarian (101 key)
- Icelandic
- Italian
- Italian (IBM)
- Italian (it2)

Warning

 The partition table on device sda was unreadable. To create new partitions it must be initialized, causing the loss of ALL DATA on this drive.

This operation will override any previous installation choices about which drives to ignore.

Would you like to initialize this drive, erasing ALL DATA?

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Agora temos que seleccionar un esquema de particóns para a instalación. Para simplificar o proceso seleccionamos a opción de eliminar as particóns de linux e instalar coa plantilla por defecto. Isto resultará nun pequeno /boot e unha partición máis longa / así como a partición de swap. Dende logo que tamén teremos a libertade de particionar o disco duro como queiramos.

The screenshot shows the 'Partitioning' step of the CentOS 5 installation process. At the top, the CentOS 5 logo is displayed against a blue background with a grid pattern. Below the logo, a message reads: 'Installation requires partitioning of your hard drive. By default, a partitioning layout is chosen which is reasonable for most users. You can either choose to use this or create your own.' A button labeled 'Remove linux partitions on selected drives and create default layout.' is shown with a dropdown arrow icon. The main area displays a list of drives: 'sda 30718 MB VMware, VMware Virtual S'. A checkbox next to 'sda' is checked. Below this is a button labeled '+ Advanced storage configuration'. In the bottom left corner, there is a link 'Release Notes' with a document icon. In the bottom right corner, there is a 'Back' button with a left arrow icon.

Installation requires partitioning of your hard drive.
By default, a partitioning layout is chosen which is reasonable for most users. You can either choose to use this or create your own.

Remove linux partitions on selected drives and create default layout. ▾

Select the drive(s) to use for this installation.

sda 30718 MB VMware, VMware Virtual S

+ Advanced storage configuration

Review and modify partitioning layout

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Respondemos con Yes a pregunta de si queremos hacer iso:

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Installation requires partitioning of your hard drive.
By default, a partitioning layout is chosen which is reasonable for most users. You can either choose to use this or create

Select the drive

sda 307

Warning

 You have chosen to remove all Linux partitions (and ALL DATA on them) on the following drives:
`/dev/sda`

Are you sure you want to do this?

Review and modify partitioning layout

Na configuración de rede. A configuración por defecto é configurar as interfaces de rede por DHCP, pero estamos instalando un servidor, polo que a configuración estática de direccións IP non é unha mala idea. Pulsaremos na opción Edit na parte superior dereita.

The screenshot shows the 'Network Devices' configuration interface. At the top, there's a table with columns: Active on Boot, Device, IPv4/Netmask, and IPv6/Prefix. A row is selected for the interface 'eth0'. The 'Active on Boot' column has a checked checkbox, the 'Device' column shows 'eth0', the 'IPv4/Netmask' column shows 'DHCP', and the 'IPv6/Prefix' column shows 'Auto'. To the right of the table is a 'Edit' button. Below the table, there's a section for 'Hostname' where it says 'Set the hostname:' followed by two radio button options: one selected for 'automatically via DHCP' and another for 'manually' with the value 'localhost.localdomain' entered. In the 'Miscellaneous Settings' section, there are three empty input fields for 'Gateway', 'Primary DNS', and 'Secondary DNS'. At the bottom left is a 'Release Notes' button, and at the bottom right is a 'Back' button.

Active on Boot	Device	IPv4/Netmask	IPv6/Prefix
<input checked="" type="checkbox"/>	eth0	DHCP	Auto

Hostname
Set the hostname:

automatically via DHCP

manually (e.g., host.domain.com)

Miscellaneous Settings

Gateway:

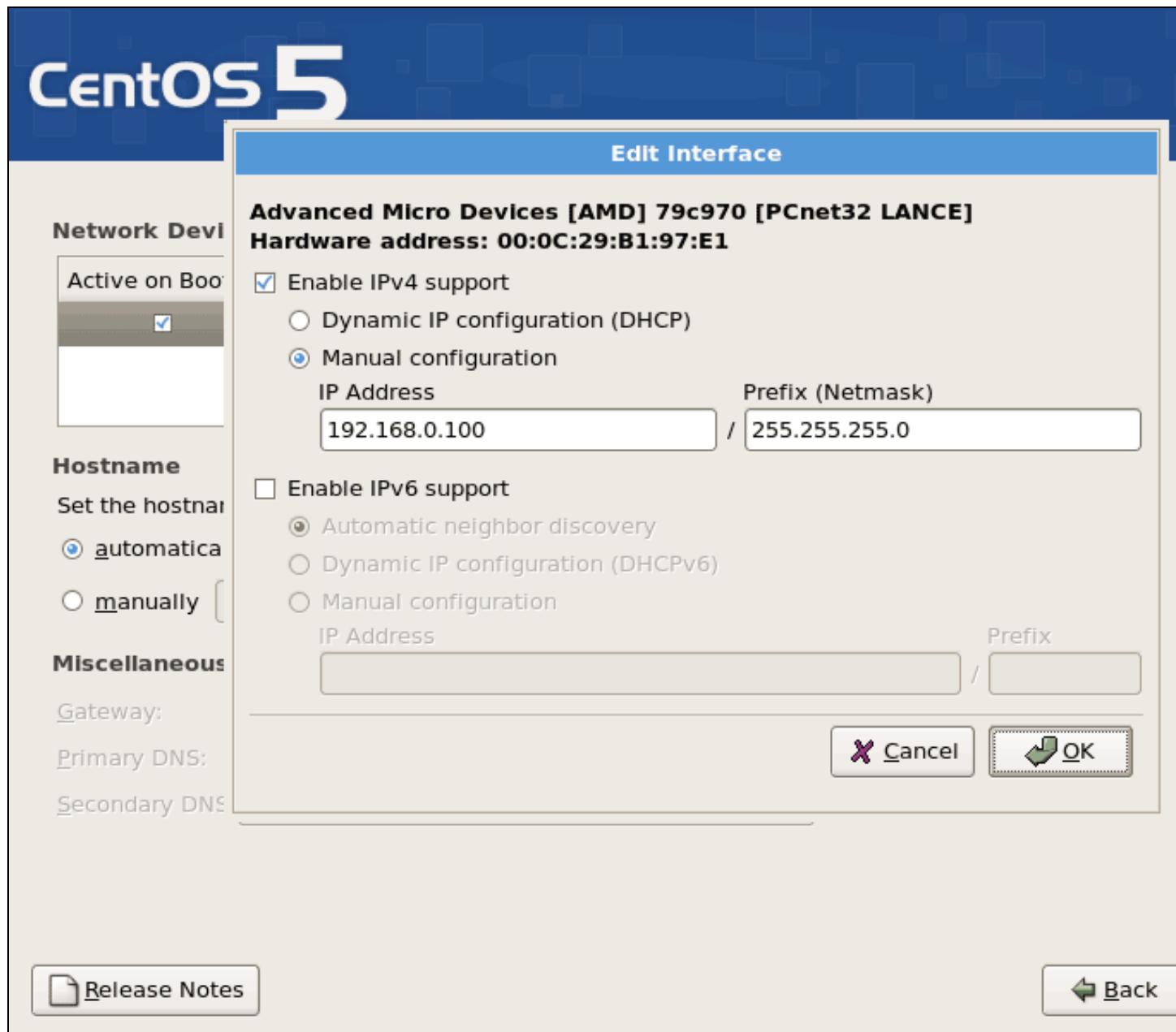
Primary DNS:

Secondary DNS:

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Na ventana que se amosa desmarcamos a opción de Usar Configuración IP dinámica (DHCP) , habilitamos si o desexamos soporte IPV6 e dámoslle á tarxeta de rede unha dirección IP estática (neste caso imos a empregar a dirección 192.168.0.100) e unha máscara clase C (255.255.255.0). Si non estamos seguros da máscara a empregar na páxina <http://www.subnetmask.info>)



Pomos o nome do host manualmente, exemplo server1.example.com, e introducimos o gateway (192.168.0.1) e ata dous servidores DNS (exemplo 213.191.92.86 e 145.253.2.75):

The screenshot shows the 'Network Devices' configuration screen. It lists a single device, eth0, which is active on boot and has an IPv4 address of 192.168.0.100/24. An 'Edit' button is available for this entry.

Hostname:
Set the hostname:
 automatically via DHCP
 manually (e.g., host.domain.com)

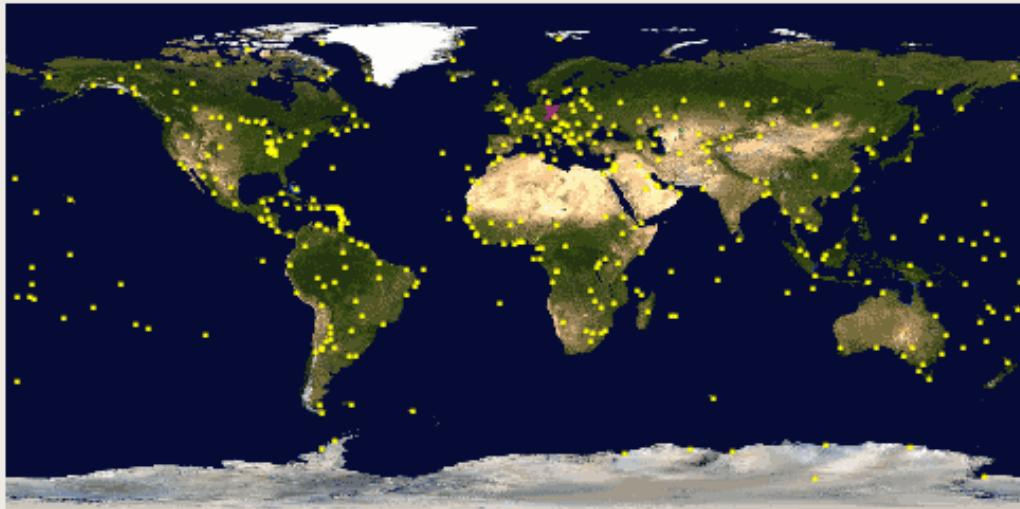
Miscellaneous Settings:
Gateway: 192.168.0.1
Primary DNS: 213.191.92.86
Secondary DNS: 145.253.2.75

Buttons at the bottom include 'Release Notes' and 'Back'.

Elegimos a zona horaria:

CentOS 5

Please click into the map to choose a region:



Europe/Berlin

System clock uses UTC

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Introducimos unha clave de root:

The CentOS 5 logo is displayed at the top left.

 The root account is used for administering the system. Enter a password for the root user.

Root Password: ······

Confirm: ······

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Instalación de CentOS 5.2 parte II

Agora seleccionamos os paquetes de software que desexamos instalar. Desmarcamos todo e deixamos soamente a opción Server. Marcamos a continuación a opción de Customize Now e pulsamos en Next:

The screenshot shows the 'Software Selection' step of the CentOS 5.2 installation. At the top, the 'CentOS 5' logo is displayed. Below it, a message reads: 'The default installation of CentOS includes a set of software applicable for general internet usage. What additional tasks would you like your system to include support for?'. A list of options is shown with checkboxes:

- Desktop - Gnome
- Desktop - KDE
- Server
- Server - GUI

A message below says: 'Please select any additional repositories that you want to use for software installation.' Another list of checkboxes follows:

- Packages from CentOS Extras

A button labeled '+ Add additional software repositories' is visible. Further down, a message states: 'You can further customize the software selection now, or after install via the software management application.' Two radio buttons are present:

- Customize later
- Customize now

At the bottom left is a 'Release Notes' button, and at the bottom right is a 'Back' button.

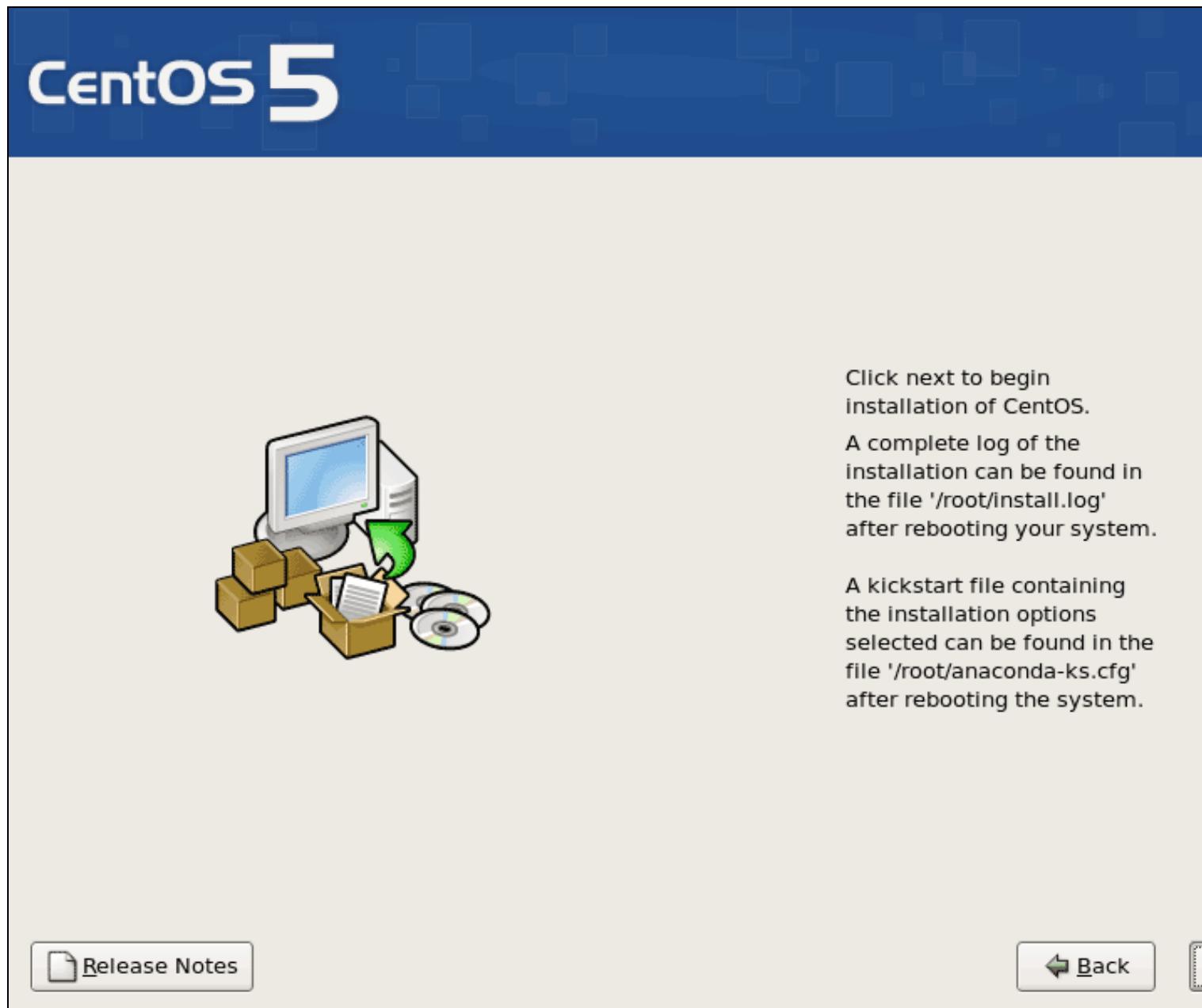
Agora deberemos seleccionar o grupo de paquetes que desexamos instalar. Seleccionamos Editors, Text-based Internet, Development Libraries, Development Tools, DNS Name Server, FTP Server, Mail Server, MySQL Database, Server Configuration Tools, Web Server, Administration Tools, Base, e System Tools (desmarcamos o resto de paquetes) e pulsamos en Next:



O instalador chequeará as dependencias entre os diferentes paquetes:



Pulsamos en Next para comenzar a instalación:



O disco duro está sendo formateado:



A instalación comenza, tardará uns minutos:

The image shows a screenshot of a CentOS 5 installation screen. At the top, the "CentOS 5" logo is displayed against a blue background with a grid pattern. Below the logo, there is a large, semi-transparent progress bar at the bottom of the screen.

CentOS Repositories

The following repositories exist in CentOS to install software from:

- [base] (aka [os]) - The RPMS released on a CentOS ISO.
- [updates] - Updates to the [base] repository.
- [extras] - Items by CentOS that are not upstream (does upgrade [base]).
- [centosplus] - Items by CentOS that are not upstream (does upgrade [base]).
- [testing] - Items in testing, beta quality packages.

More info: <http://mirror.centos.org/centos/5/Readme.txt>

Installing xorg-x11-xauth-1.0.1-2.1.i386 (48 KB) X.Org X11 X authority utilities Remaining time: 1

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Finalmente, a instalación está completada e xa podemos sacar o CD ou DVD de ordenador e reiniciar:

CentOS 5



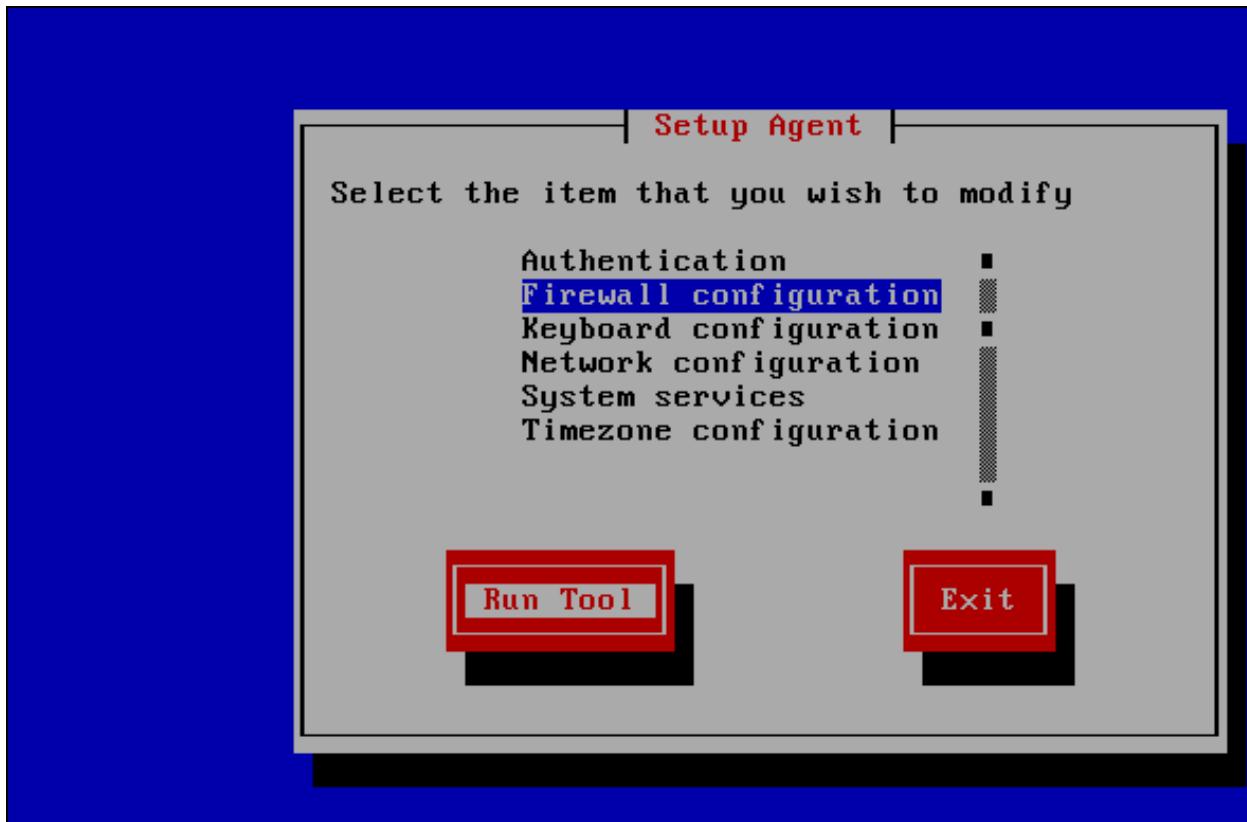
Congratulations, the installation is complete.

Remove any media used during the installation process and press "Reboot" button to reboot your system.

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Despois do reboot veremos a seguinte pantalla. Seleccionaremos configuración do Firewall e executaremos a ferramenta:



<Tab>/<Alt-Tab> between elements | <Space> selects | <F12> next screen

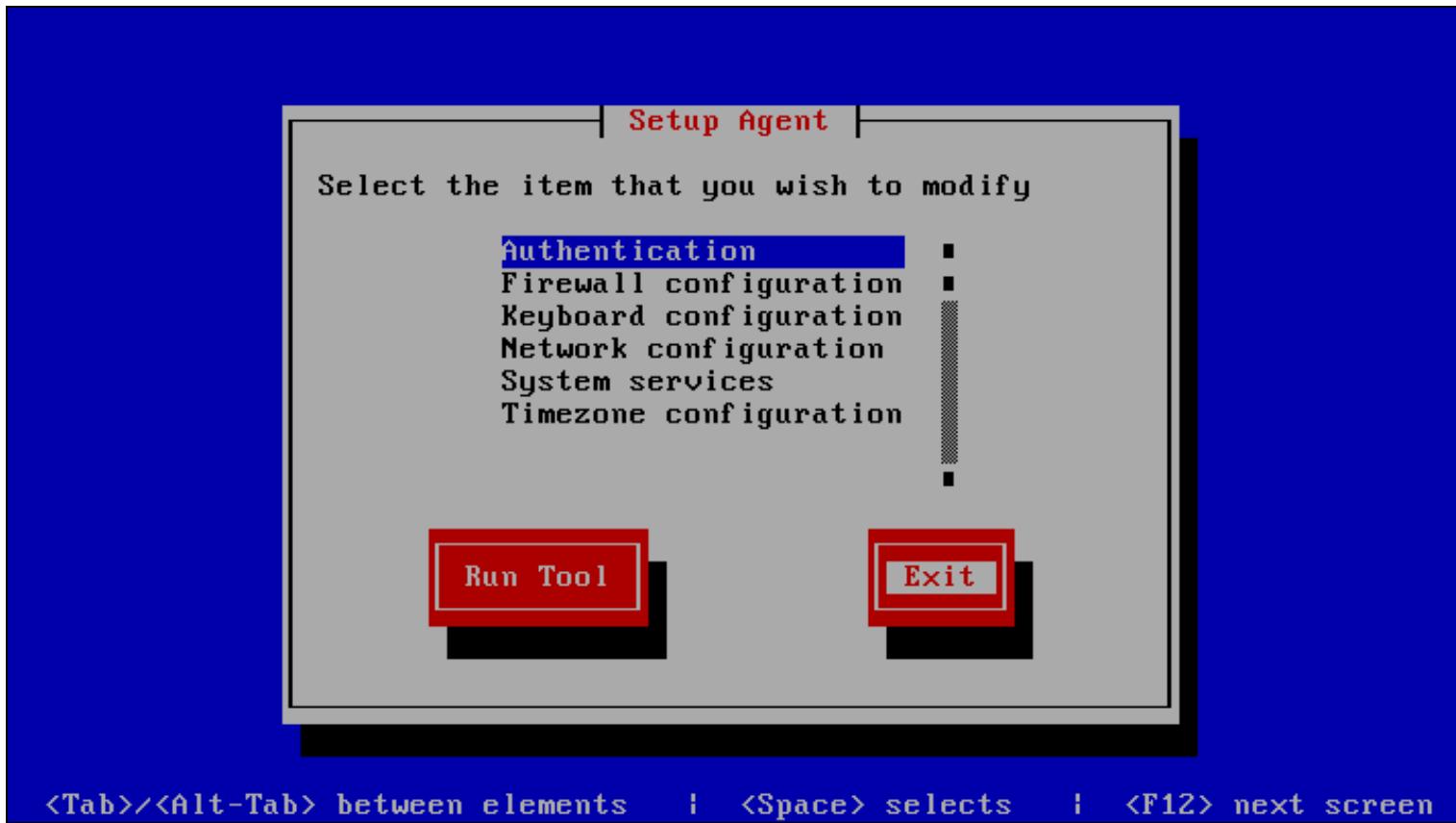
Deshabilitaremos o firewall do CentOS e tamén SELinux o cal proporciona seguridade extendida.

system-config-securitylevel © 2003 Red Hat, Inc.



<Tab>/<Alt-Tab> between elements | <Space> selects | <F12> next screen

Pulsaremos Exit para salir do axente de configuración:



A continuación entramos como root e reiniciaremos o sistema para que se apliquen os cambios:

```
reboot
```

Imos agora á configuración....

Instalación de CentOS 5.2 parte III

Axustamos /etc/hosts

Editamos o arquivo /etc/hosts para que sexa semellante ó seguinte:

```
vi /etc/hosts
```

```
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1      localhost.localdomain localhost
192.168.0.100   server1.example.com server1
::1            localhost6.localdomain6 localhost6
```

Configuramos direccións IP adicionais.

(Esta sección é opcional. Soamente amosa como engadir direccións IP adicionais á interface de rede eth0 no caso que necesitamos máis de unha dirección IP. Si non necesitamos máis direccións IP podemos saltar esta sección.)

Asumimos que a nosa interface de rede é eth0. Polo tanto hai un arquivo /etc/sysconfig/network-scripts/ifcfg-eth0 o cal contén as configuracións para eth0. Podemos usar este arquivo para configurar unha nova interface de rede virtual eth0:0:

```
cp /etc/sysconfig/network-scripts/ifcfg-eth0 /etc/sysconfig/network-scripts/ifcfg-eth0:0
```

Agora queremos usar a dirección IP 192.168.0.101 na interface virtual eth0:0. Polo tanto abriremos ese arquivo /etc/sysconfig/network-scripts/ifcfg-eth0:0 e o modificamos do seguinte xeito (podemos deixar o apartado HWADDR xa que é a mesma dirección física

da tarxeta):

```
vi /etc/sysconfig/network-scripts/ifcfg-eth0:  
  
# Advanced Micro Devices [AMD] 79c970 [PCnet32 LANCE]  
DEVICE=eth0:0  
BOOTPROTO=static  
BROADCAST=192.168.0.255  
IPADDR=192.168.0.101  
NETMASK=255.255.255.0  
NETWORK=192.168.0.0  
ONBOOT=yes
```

Despois disto temos que reiniciar os servicios de rede:

```
/etc/init.d/network restart
```

Tamén podemos axustar o arquivo /etc/hosts despois de engadir a nova dirección IP, ainda que isto non é necesario.

Agora executamos

```
ifconfig
```

Deberíamos ver a nova dirección IP na saída:

```
[root@server1 ~]# ifconfig  
eth0      Link encap:Ethernet HWaddr 00:0C:29:B1:97:E1  
          inet addr:192.168.0.100 Bcast:192.168.0.255 Mask:255.255.255.0  
          inet6 addr: fe80::20c:29ff:feb1:97e1/64 Scope:Link  
            UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1  
            RX packets:310 errors:0 dropped:0 overruns:0 frame:0  
            TX packets:337 errors:0 dropped:0 overruns:0 carrier:0  
            collisions:0 txqueuelen:1000  
            RX bytes:28475 (27.8 KiB) TX bytes:72116 (70.4 KiB)  
            Interrupt:177 Base address:0x1400  
  
eth0:0    Link encap:Ethernet HWaddr 00:0C:29:B1:97:E1  
          inet addr:192.168.0.101 Bcast:192.168.0.255 Mask:255.255.255.0  
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1  
          Interrupt:177 Base address:0x1400  
  
lo       Link encap:Local Loopback  
          inet addr:127.0.0.1 Mask:255.0.0.0  
          inet6 addr: ::1/128 Scope:Host  
            UP LOOPBACK RUNNING MTU:16436 Metric:1  
            RX packets:8 errors:0 dropped:0 overruns:0 frame:0  
            TX packets:8 errors:0 dropped:0 overruns:0 carrier:0  
            collisions:0 txqueuelen:0  
            RX bytes:560 (560.0 b) TX bytes:560 (560.0 b)  
  
[root@server1 ~]#
```

Instalación de algún software

Primeiro importamos as claves CPG para os paquetes de software:

```
rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY*
```

A continuación actualizamos os paquetes actuais do sistema:

```
yum update
```

Instalamos os seguintes paquetes que necesitaremos más adiante:

```
yum install fetchmail wget bzip2 unzip zip nmap openssl lynx fileutils ncftp gcc gcc-c++
```

Install A Chrooted DNS Server (BIND9)

Para instalar BIND9 chrooted faremos o seguinte:

```
yum install bind-chroot
```

A continuación:

```
chmod 755 /var/named/
chmod 775 /var/named/chroot/
chmod 775 /var/named/chroot/var/
chmod 775 /var/named/chroot/var/named/
chmod 775 /var/named/chroot/var/run/
chmod 777 /var/named/chroot/var/run/named/
cd /var/named/chroot/var/named/
ln -s ../../ chroot
cp /usr/share/doc/bind-9.3.4/sample/var/named/named.local /var/named/chroot/var/named/named.local
cp /usr/share/doc/bind-9.3.4/sample/var/named/named.root /var/named/chroot/var/named/named.root
touch /var/named/chroot/etc/named.conf
chkconfig --levels 235 named on
/etc/init.d/named start
```

BIND se executará a continuación baixo /var/named/chroot/var/named/.

MySQL (5.0)

Para instalar MySQL faremos o seguinte:

```
yum install mysql mysql-devel mysql-server
```

A continuación creamos o enlace para que arranque có sistema:

```
chkconfig --levels 235 mysqld on
/etc/init.d/mysqld start
```

Agora chequeamos que a rede está habilitada e executamos:

```
netstat -tap | grep mysql
</souce>
```

E debería aparecer algo como:

```
<source lang=bash>
[root@server1 ~]# netstat -tap | grep mysql
tcp        0      0 *:mysql          *:*      LISTEN      2584/mysqld
[root@server1 ~]#
```

Si non aparece, editaremos /etc/my.cnf e comentamos a opción skip-networking:

```
vi /etc/my.cnf

[...]
#skip-networking
[...]
```

e reiniciamos o servidor de MySQL:

```
/etc/init.d/mysqld restart
```

Executamos:

```
mysqladmin -u root password yourrootsqlpassword
```

```
mysqladmin -h server1.example.com -u root password yourrootsqlpassword
```

para modificar a password do user root (noutro caso calqueira podería acceder á base de datos MySQL).

Instalación de CentOS 5.2 parte IV

Apache2 con PHP

Agora instalamos Apache con PHP (PHP 5.1.6):

```
yum install php php-devel php-gd php-imap php-ldap php-mysql php-odbc  
php-peach php-xml php-xmlrpc curl curl-devel perl-libwww-perl  
ImageMagick libxml2 libxml2-devel
```

A continuación editamos /etc/httpd/conf/httpd.conf:

```
vi /etc/httpd/conf/httpd.conf
```

e modificamos DirectoryIndex a

```
[...]  
DirectoryIndex index.html index.htm index.shtml index.cgi index.php index.php3 index.pl  
[...]
```

Configuramos a continuación o sistema para que o Apache arranque no inicio:

```
chkconfig --levels 235 httpd on
```

Arrancamos Apache:

```
/etc/init.d/httpd start
```

Sincronizamos o reloxo do sistema

Si queremos deixar o reloxo do sistema sincronizado cun servidor de hora NTP faremos o seguinte:

```
yum install ntp  
  
chkconfig --levels 235 ntpd on  
ntpdate 0.pool.ntp.org  
/etc/init.d/ntpd start
```

Instalaremos algúns módulos Perl adicionais

```
yum install perl-HTML-Parser perl-DBI perl-Net-DNS perl-Digest-SHA1
```