



UNIT 1. ACTIVITY

Web Applications Deployment
CFGS DAW

Important: this activity is not mandatory and does not compute for the final grade, but it is necessary for coming activities.

Importante: esta actividad no es obligatoria y no cuenta para la nota final, pero es necesaria para actividades futuras.

Author: Carlos Cacho

Reviewed by: Lionel Tarazón
lionel.tarazon@ceedcv.es

License



Attribution-NonCommercial-ShareAlike (by-nc-sa) You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may not use the material for commercial purposes. If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. This work is a derivative of the original work created by Carlos Cacho.

Nomenclature

During this unit we are going to use special symbols to distinct some important elements.

This symbols are:



Important



Attention



Interesting

INDEX

1.Introduction.....	4
2.Installing the virtual machines.....	4
3.Configuring the virtual machines.....	11
3.1 Configuring LinuxServer.....	13
3.2 Configuring WindowsServer.....	16
3.3 Configuring LinuxClient.....	21
4.Check the configuration.....	21
4.1 Activate the ping in the firewall of Windows.....	22
5.Installing Webmin.....	24
5.1 Parts of Webmin.....	27
5.1.1 Backup Configuration Files.....	27
5.1.2 Change Language and Theme.....	31
5.1.3 Webmin Actions Log.....	32
5.1.4 Webmin Configuration.....	33
5.1.5 Webmin Servers Index.....	34
5.1.6 Webmin Users.....	34

UT01. INTRODUCTION TO WEB ARCHITECTURES ACTIVITY

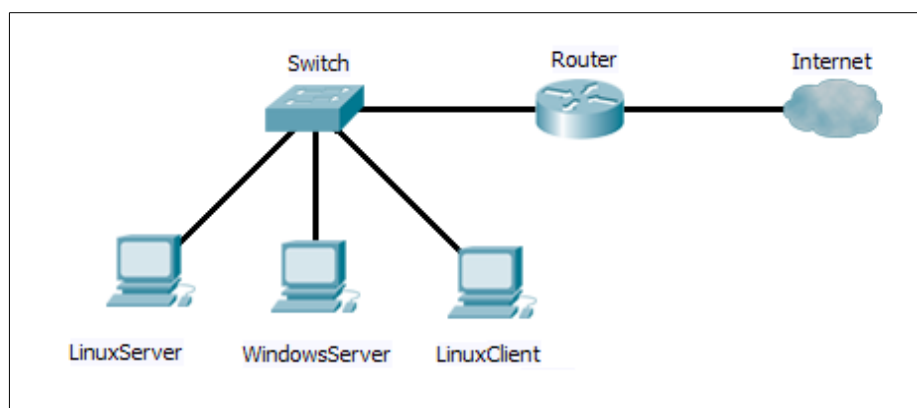
1. INTRODUCTION

In this first activity, we are going to prepare the virtual machines that we will use during the first term.

Thanks to the virtual machines we are able to install, manage and use different Operating Systems (OS) in our computer. There are many applications of virtualization but we are going to use Oracle VM VirtualBox because is free, cross-platform, easy to use and can do safety copies, among other features.


If you want to learn more about it you can read the official user manual: <https://www.virtualbox.org/manual/UserManual.html>

The aim of this activity is to get a scene with two servers (one with Linux and the other with Windows (in this activity we will install it but its configuration is optional, it will be done in the *to know more activities*) and one client (with Linux) and create the following network:



2. INSTALLING THE VIRTUAL MACHINES

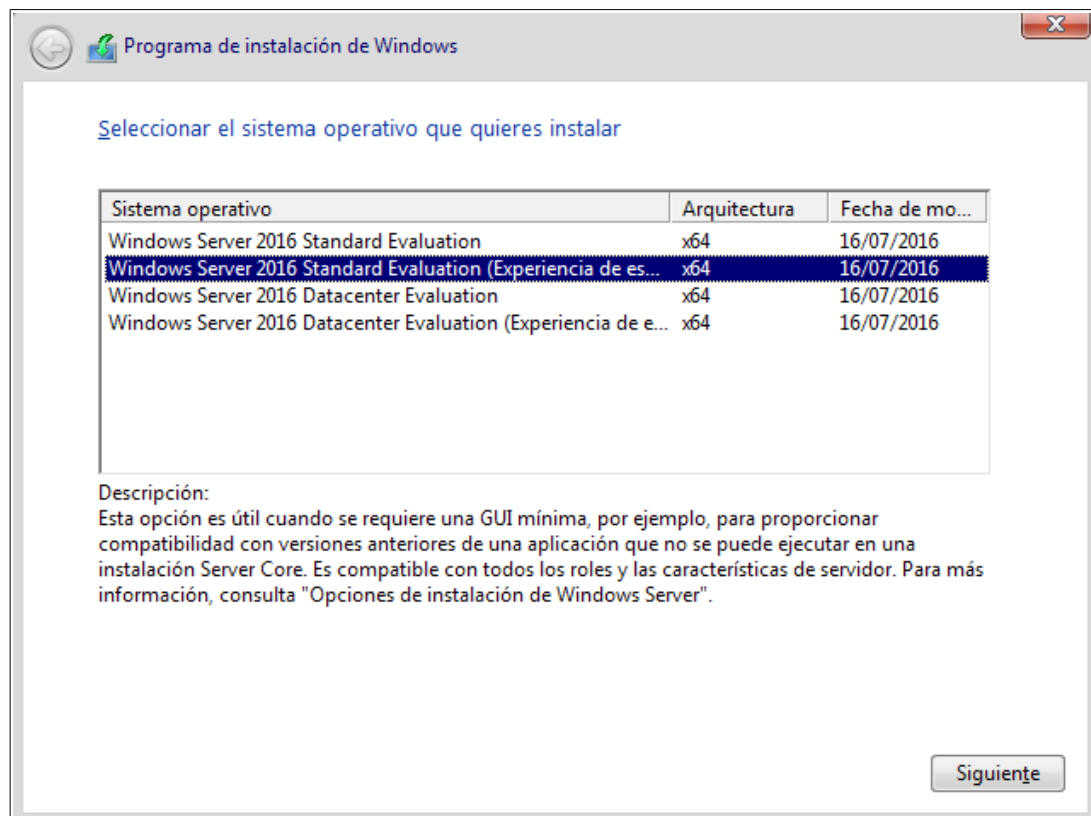
First of all, we will download the program from the official web page (<https://www.virtualbox.org/wiki/Downloads>) where we should choose the OS we are using and install it in our computer.

 If you have any problem with the installation with VirtualBox or the creation of a virtual machine you can watch this video (<https://www.youtube.com/watch?v=J4R2mDIIEKo>) (You can activate the subtitles)

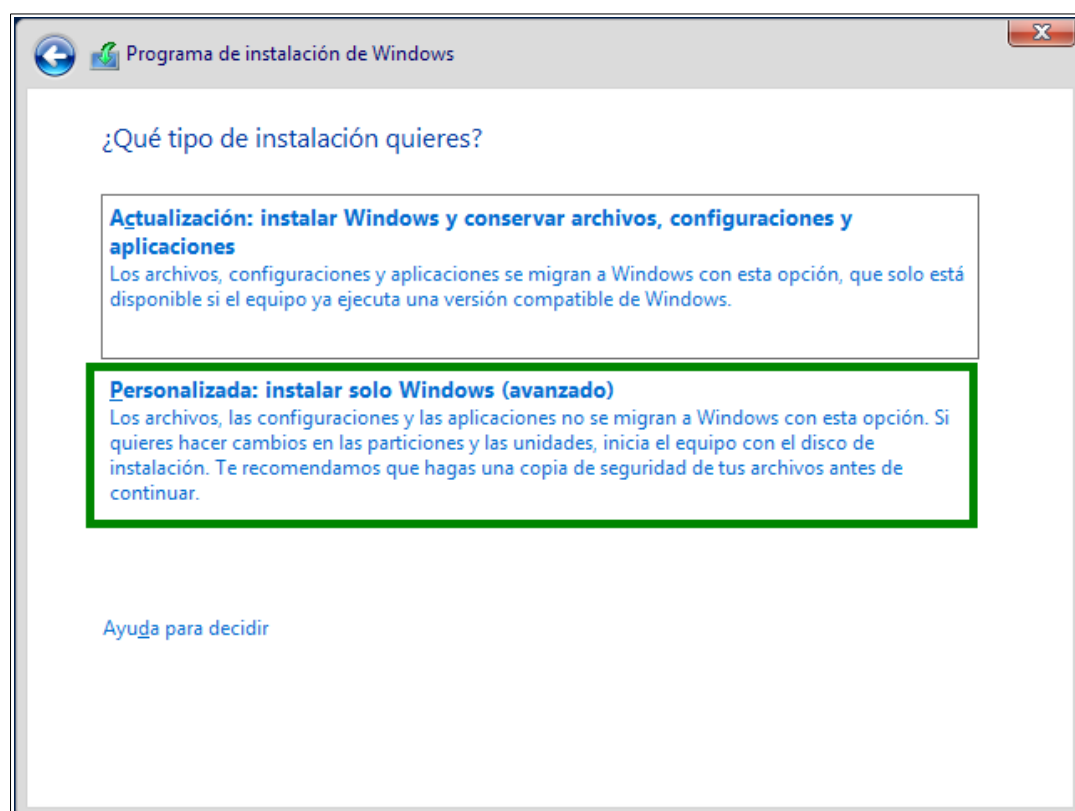
Once installed, we will install the OS (we need the ISO file):

- Linux Ubuntu 32 or 64 bits (you can use 16.04 version or higher) (*LinuxServer* and *LinuxClient*): you can download it from the Ubuntu's official web (<http://www.ubuntu.com/download/desktop> or <https://www.ubuntu.com/download/alternative-downloads>). It is not the server version but we can download every packet we need. If you have problems with this distribution you can use others like *Lubuntu*.
- Windows Server 2016: (We will use this virtual machine only to do tests with Linuxserver but if you want to configure it you can do the *to know more activities* (volunteer activities in unit 2 and 3)) To download Windows Server, you have to go to *TechNet Evaluation Center* from Microsoft site (<https://www.microsoft.com/es-es/evalcenter/evaluate-windows-server-2016>), register and download the **ISO** file for Windows Server 2016 (64 bits). If you have problems with this version you can install Windows Server 2012 from the same page.

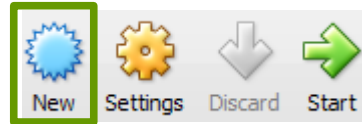
During the installation we will choose the *Standard Evaluation(Experiencia de escritorio)*:



and choose the **Custom** option (you do not need create new partitions)

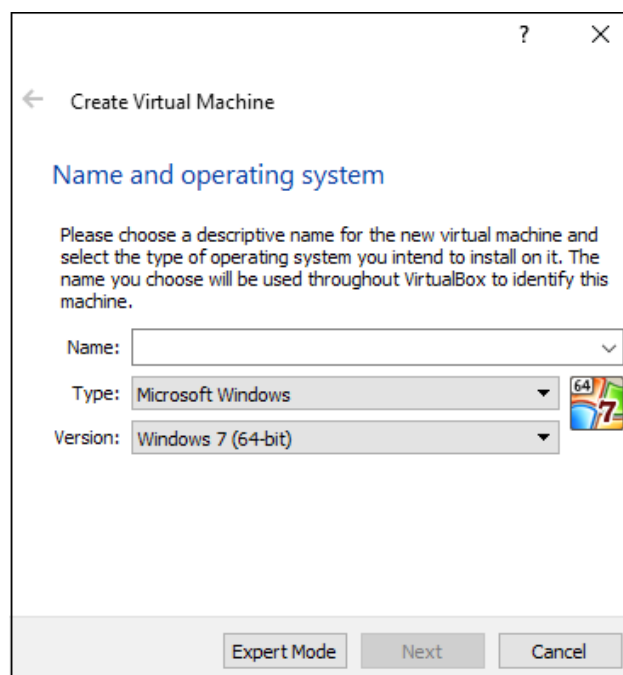


Now, we are going to create the virtual machine for each OS. For that, open the VirtualBox program, click in **New** and the process will start.

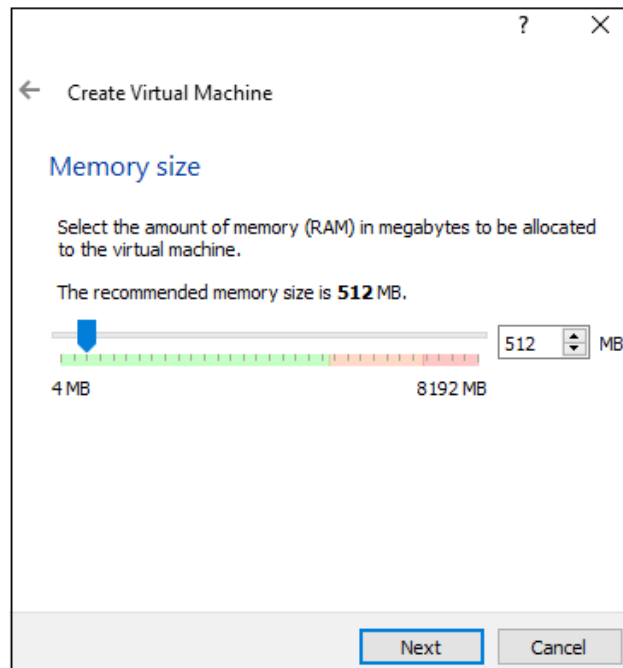


During the installation of any OS you will:

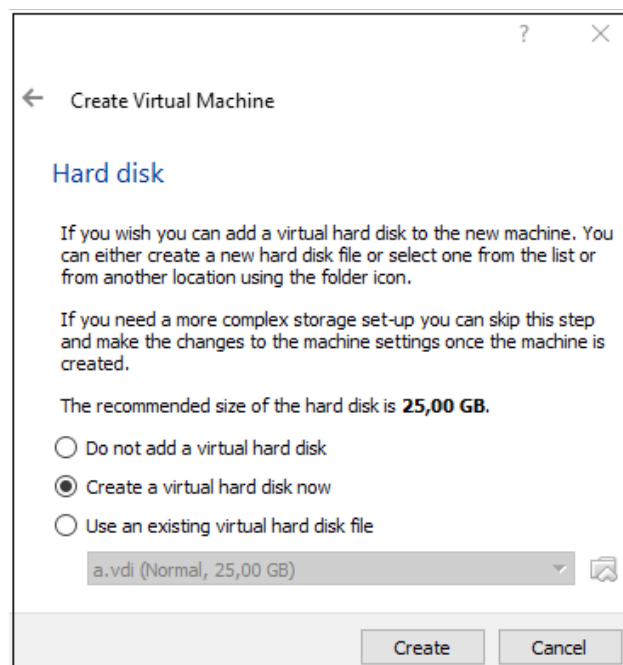
- give a name to your virtual machine and choose the kind of OS (For instance, for Windows Server we have to choose *Type: Microsoft Windows* and *Version: Other Windows (64-bit)*)

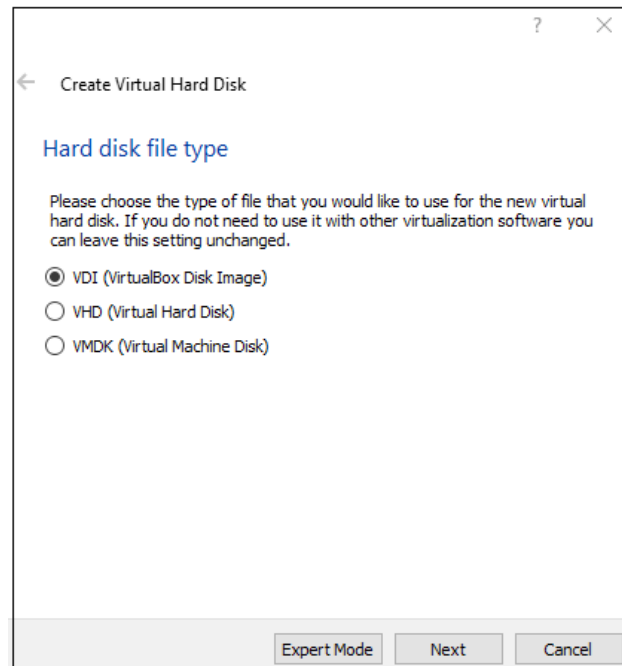


- select the amount of memory RAM. (Be careful in this point because during the activities we will load two virtual machines at the same time. So for example, if your computer has 4 GB you can choose 1GB for each virtual machine, but if your computer has 2GB you can not do it because the physical machine needs RAM too, so you should choose around 500MB for each virtual machine.)

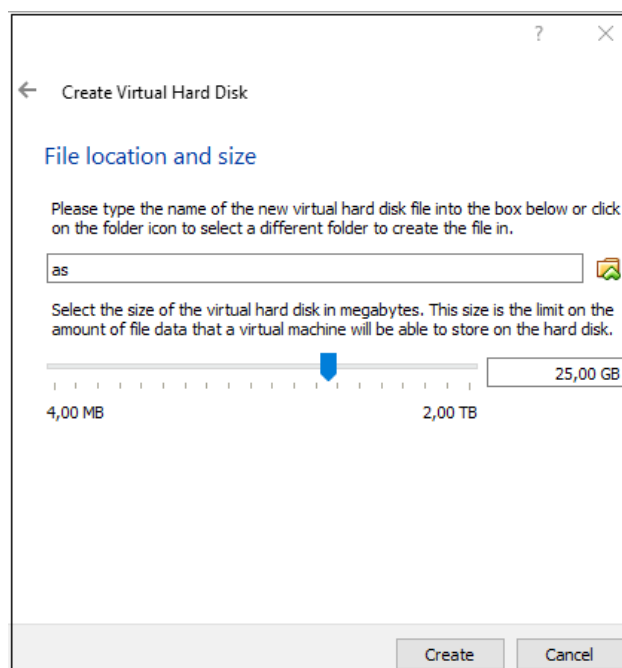


- create a virtual hard disk (the default option). It will be a VDI (VirtualBox Disk Image)

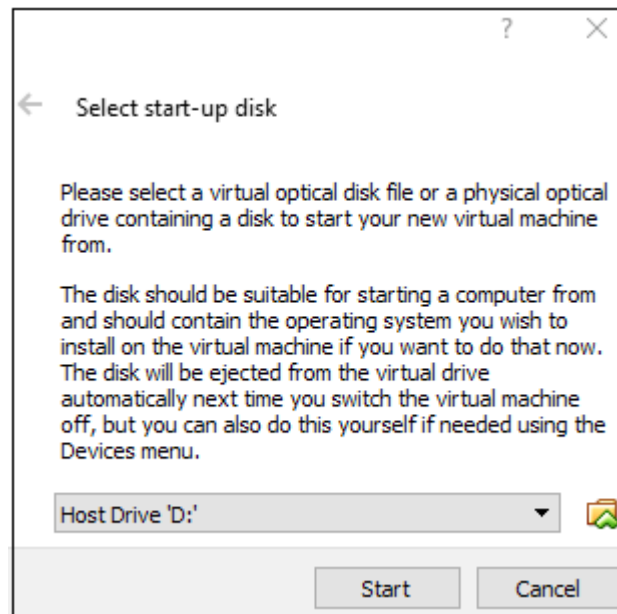




- select a dynamically allocated hard disk file



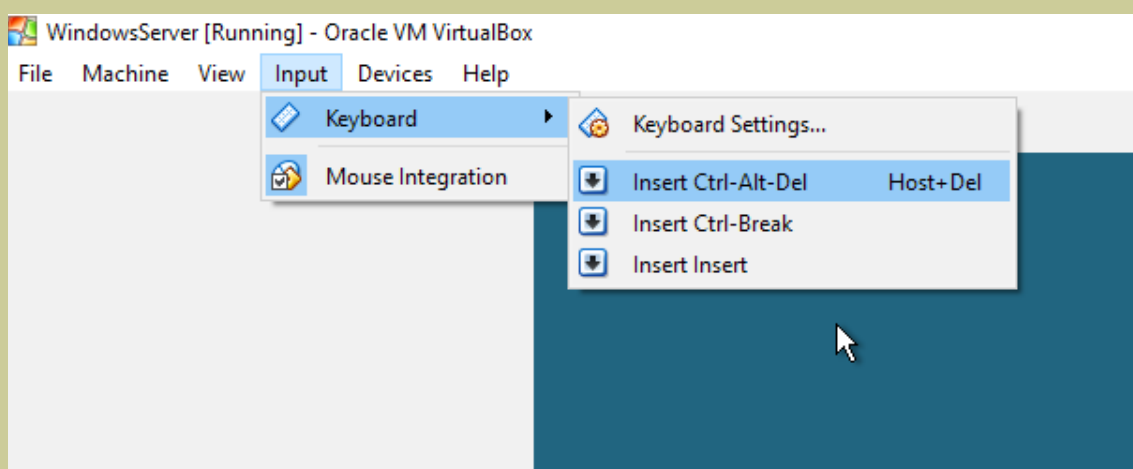
- and finally, choose the virtual hard disk location and its size (with 30 or 40 GB is enough)



With this, the virtual machine is created. Now we have to click on **Start** and choose where is the OS iso file in our computer. Then the OS installation will start.

You can see all the process in the same video: <https://www.youtube.com/watch?v=J4R2mDIIEKo>

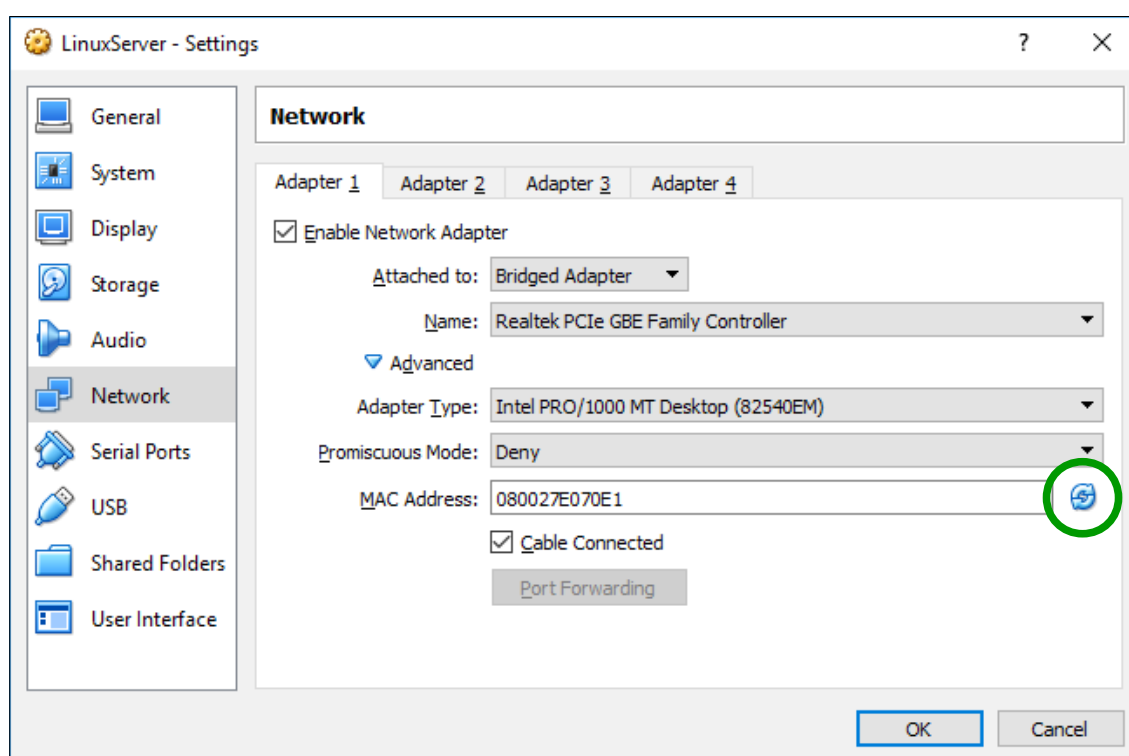
It is important to know that if we need to type Ctrl+Alt+Del inside the virtual machine (for example, in Windows Server 2016) we will have to select **Input > Keyboard > Insert Ctrl-Alt-Del**



In each OS we will create a user with administrator privileges. Use an easily remember username and password.

Once the three OS are installed, let's go to configure them. In order that the virtual machine could accede to the router it must be bypassed (*bridged*).

Go to the menu **Settings > Network > Adapter 1**. We are going to indicate it that it is connected to a bridge adapter. Also we are going to change the MAC address of any virtual machine to avoid have MAC duplicate for that we will click on the refresh button:



Do this for each virtual machine.

3. CONFIGURING THE VIRTUAL MACHINES

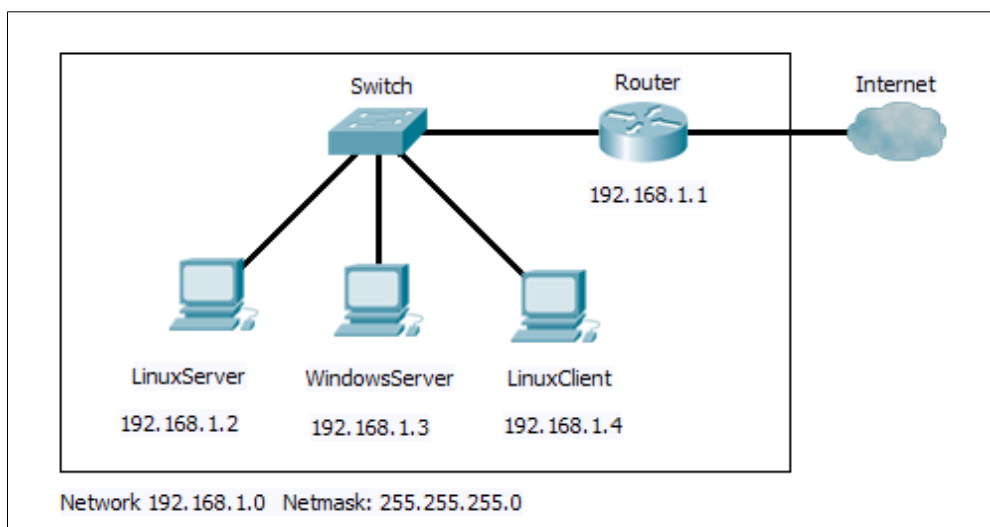
Now we are going to include the virtual machines into our network. For that we are going to assign an IP address to each virtual machine to allow the connexion between them and Internet.

We are going to assign an IP address that belongs to our **home network**.

For instance, if my home network IP address is 192.128.0.0 and the IP of my router is 192.168.0.1, I will change it in each virtual machine, I could use 192.168.0.X ($2 \leq X \leq 254$).

You have to **be careful** and not to assign an IP address used in your network, it means that if my physical machine has the IP address 192.168.0.10, I do not have to use it in any virtual machine.

To do the activity we will use the following network (the IP address of my physical machine is 192.168.1.10):



You can fill these tables to have a guide of the IP address you will use:

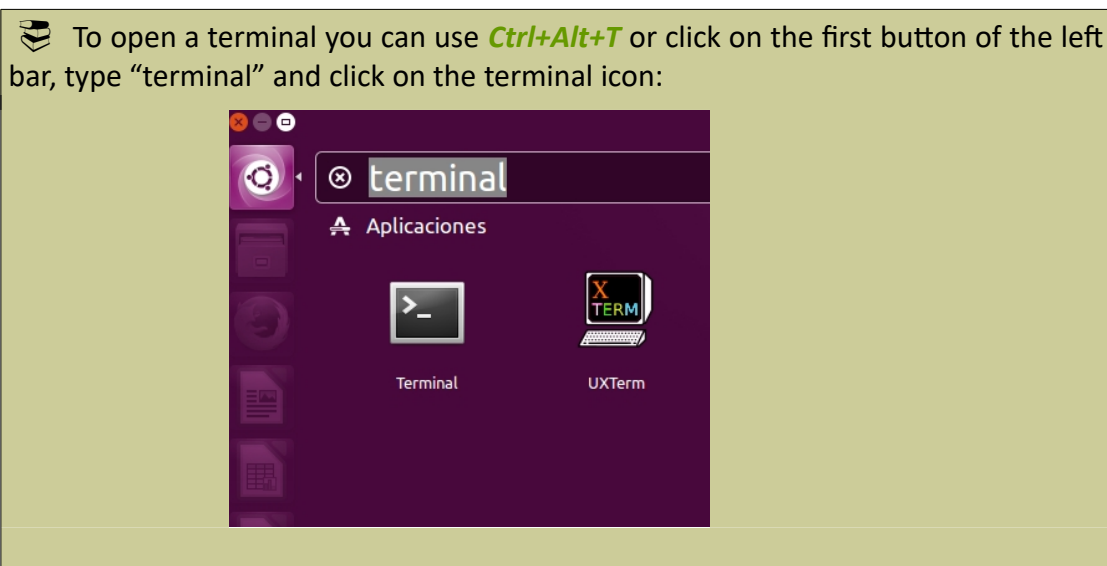
LinuxServer	IP address	Router	DNS
Me	192.168.1.2	192.168.1.1	192.168.1.1
You			

WindowsServer	IP address	Router	DNS
Me	192.168.1.3	192.168.1.1	192.168.1.1
You			

LinuxClient	IP address	Router	DNS
Me	192.168.1.4	192.168.1.1	192.168.1.1
You			

3.1 Configuring LinuxServer

Enter into the *LinuxServer* machine with the administrator user.



First, we are going to work with the terminal. For that, open a terminal and follow the following steps:


1. Let's look for the name of the network device used by the system:
ifconfig -a

We will have something like:


```
administrador@administrador-VirtualBox:~$ ifconfig -a
enp0s3    Link encap:Ethernet  direcciónHW 08:00:27:ab:62:5d
          Dirección inet6: fe80::e944:a084:437:42e3/64 Alcance:Enlace
          ACTIVO DIFUSIÓN FUNCIONANDO MULTICAST MTU:1500 Métrica:1
          Paquetes RX:2582 errores:0 perdidos:0 overruns:0 frame:0
          Paquetes TX:1416 errores:0 perdidos:0 overruns:0 carrier:0
          colisiones:0 long.colaTX:1000
          Bytes RX:2019377 (2.0 MB)  TX bytes:106565 (106.5 KB)

lo        Link encap:Bucle local
          Direc. inet:127.0.0.1 Másc:255.0.0.0
          Dirección inet6: ::1/128 Alcance:Anfitrión
          ACTIVO BUCLE FUNCIONANDO MTU:65536 Métrica:1
          Paquetes RX:269 errores:0 perdidos:0 overruns:0 frame:0
          Paquetes TX:269 errores:0 perdidos:0 overruns:0 carrier:0
          colisiones:0 long.colaTX:1
          Bytes RX:19430 (19.4 KB)  TX bytes:19430 (19.4 KB)
```

Where ***enp0s3*** is our network interface and ***lo*** the loopback address.

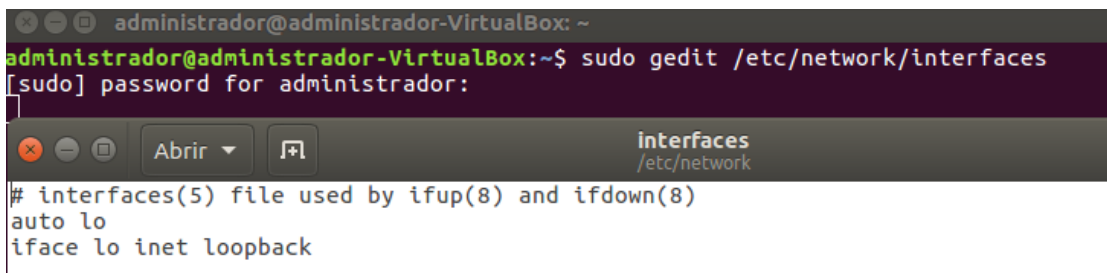
 **Loopback** address is a special IP number (**127.0.0.1**) that is designated for the software loopback interface of a machine. The loopback interface has no hardware associated with it, and it is not physically connected to a network.

The loopback interface allows IT professionals to test IP software without worrying about broken or corrupted drivers or hardware.


2. Now we are going to configure a static IP address in the server. 

For that, open the network configuration file `/etc/network/interfaces` and modify it to adapt to the IPs we have indicated in the previous point.

To modify this file we have to be root, so we have to write **sudo** before the instruction:

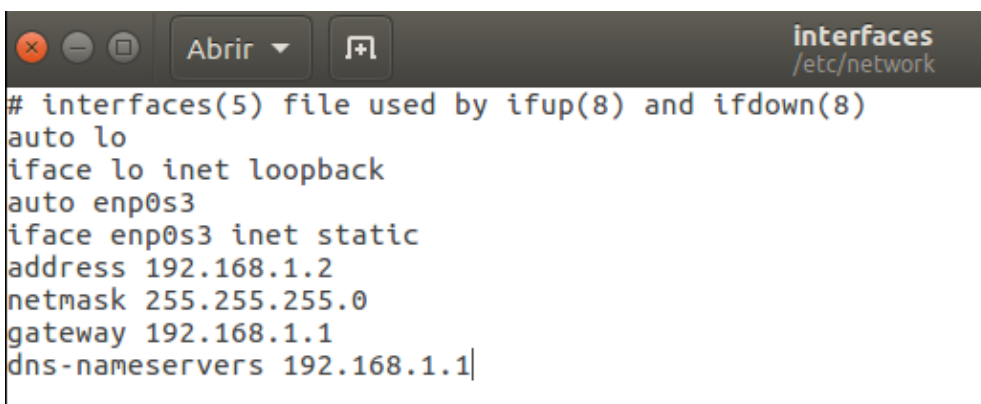


```
administrador@administrador-VirtualBox: ~  
administrador@administrador-VirtualBox:~$ sudo gedit /etc/network/interfaces  
[sudo] password for administrador:  
# interfaces(5) file used by ifup(8) and ifdown(8)  
auto lo  
iface lo inet loopback
```

 **gedit** is the default text editor of the GNOME desktop environment. Ubuntu uses it. Also you can use **nano** or other text editor.

In this file we have to write what the name of the network interface is, if it has a static IP address, what that address is, its netmask, the IP address of the router(gateway) and the DNS (the same of the router or other public as 8.8.8.8 or similar).

The file will be like this:



```
# interfaces(5) file used by ifup(8) and ifdown(8)  
auto lo  
iface lo inet loopback  
auto enp0s3  
iface enp0s3 inet static  
address 192.168.1.2  
netmask 255.255.255.0  
gateway 192.168.1.1  
dns-nameservers 192.168.1.1
```



IMPORTANT:

If you are using Ubuntu 18 or newer, you will not be able to change the network configuration as explained above. Instead, use the settings interface as explained in [this guide](#).

- Restart the web service to apply the changes:

sudo service networking restart or *sudo /etc/init.d/networking restart*

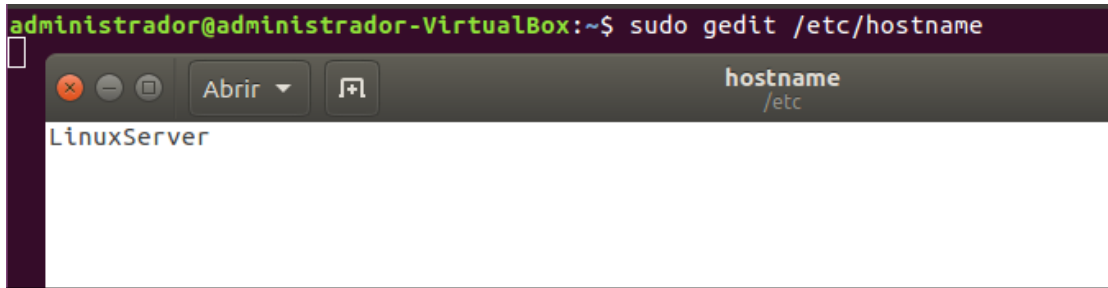
- Check that the configuration is right:

```
administrador@LinuxServer:~$ ifconfig -a
enp0s3    Link encap:Ethernet  direcciónHW 08:00:27:ab:62:5d
          Direc. inet:192.168.1.2  Difus.:192.168.1.255  Másc:255.255.255.0
          Dirección inet6: fe80::a00:27ff:feab:625d/64 Alcance:Enlace
          ACTIVO DIFUSIÓN FUNCIONANDO MULTICAST MTU:1500 Métrica:1
          Paquetes RX:26056 errores:0 perdidos:0 overruns:0 frame:0
          Paquetes TX:13650 errores:0 perdidos:0 overruns:0 carrier:0
          colisiones:0 long.colaTX:1000
          Bytes RX:38744599 (38.7 MB)  TX bytes:954234 (954.2 KB)

lo        Link encap:Bucle local
          Direc. inet:127.0.0.1  Másc:255.0.0.0
          Dirección inet6: ::1/128 Alcance:Anfitrión
          ACTIVO BUCLE FUNCIONANDO MTU:65536 Métrica:1
          Paquetes RX:166 errores:0 perdidos:0 overruns:0 frame:0
          Paquetes TX:166 errores:0 perdidos:0 overruns:0 carrier:0
          colisiones:0 long.colaTX:1
          Bytes RX:12178 (12.1 KB)  TX bytes:12178 (12.1 KB)
```

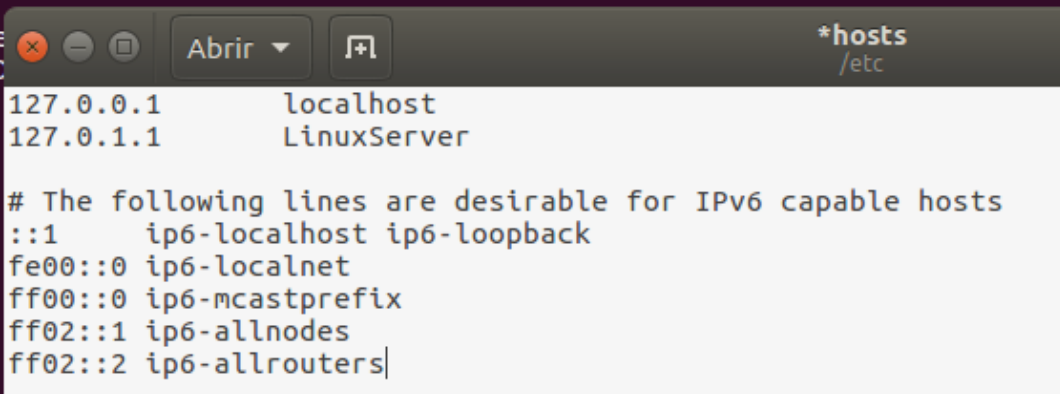
- Now we are going to change the name of the machine. Edit the configuration file */etc/hostname* and change the name for LinuxServer:

```
administrador@administrador-VirtualBox:~$ sudo gedit /etc/hostname
```



- Now we can edit the file `/etc/hosts` and associate the name `LinuxServer` to the IP address `127.0.1.1` (loopback):

```
administrador@administrador-VirtualBox:~$ sudo gedit /etc/hosts
```



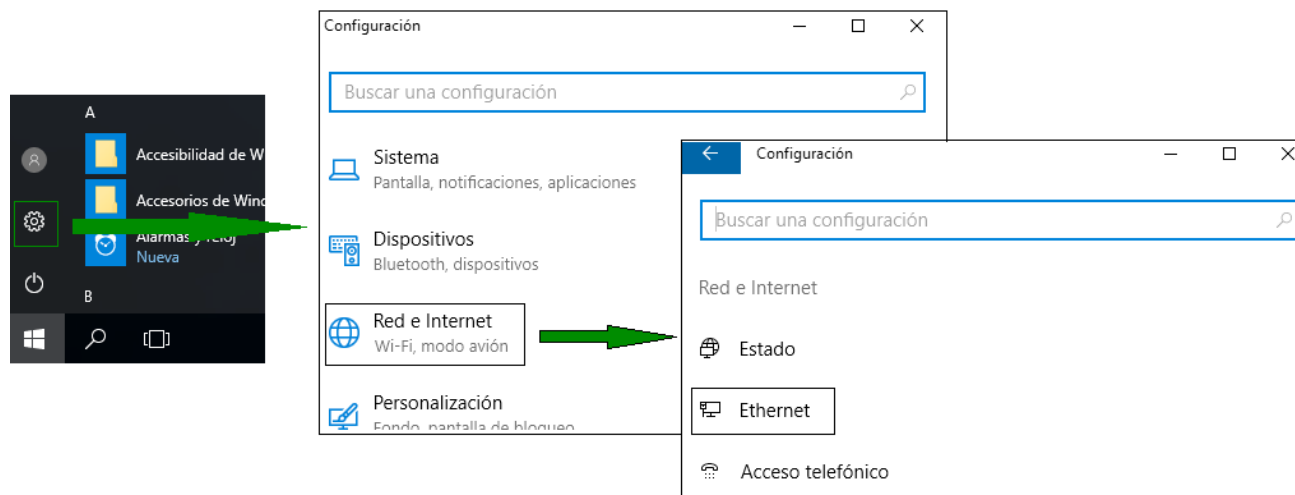
- Next we restart the machine: `sudo reboot`
- Check that the hostname is changed and if the DNS address is correct in the configuration file `/etc/resolv.conf`:

```
administrador@LinuxServer:~$ sudo cat /etc/resolv.conf
[sudo] password for administrador:
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
nameserver 192.168.1.1
administrador@LinuxServer:~$
```

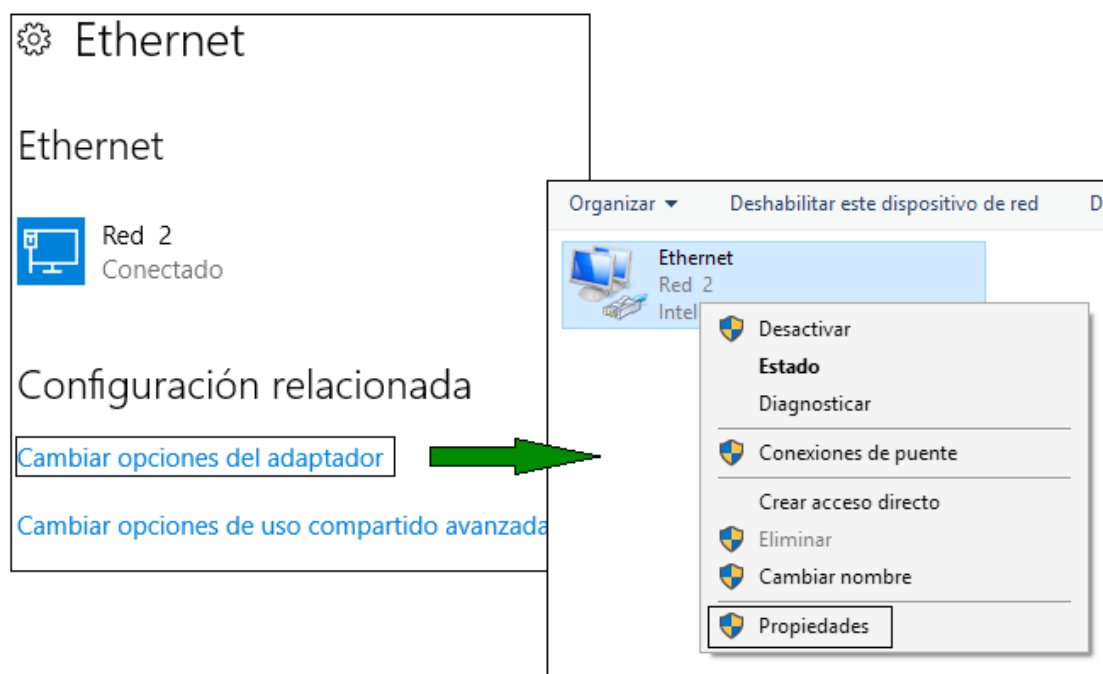
3.2 Configuring WindowsServer

Enter into the `WindowsServer` machine with the administrator user.

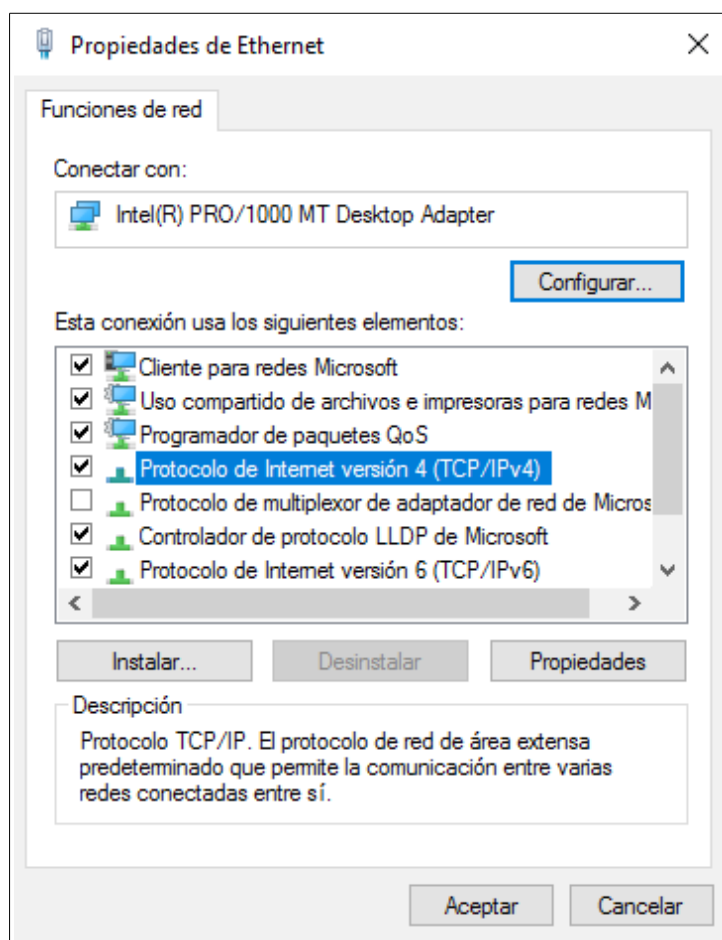
First we are going to configure the static IP address, the netmask, the IP address of the router (gateway) and the DNS (the same of the router). To do that we have to go to

START MENU > CONFIGURATION > NETWORK AND INTERNET > ETHERNET

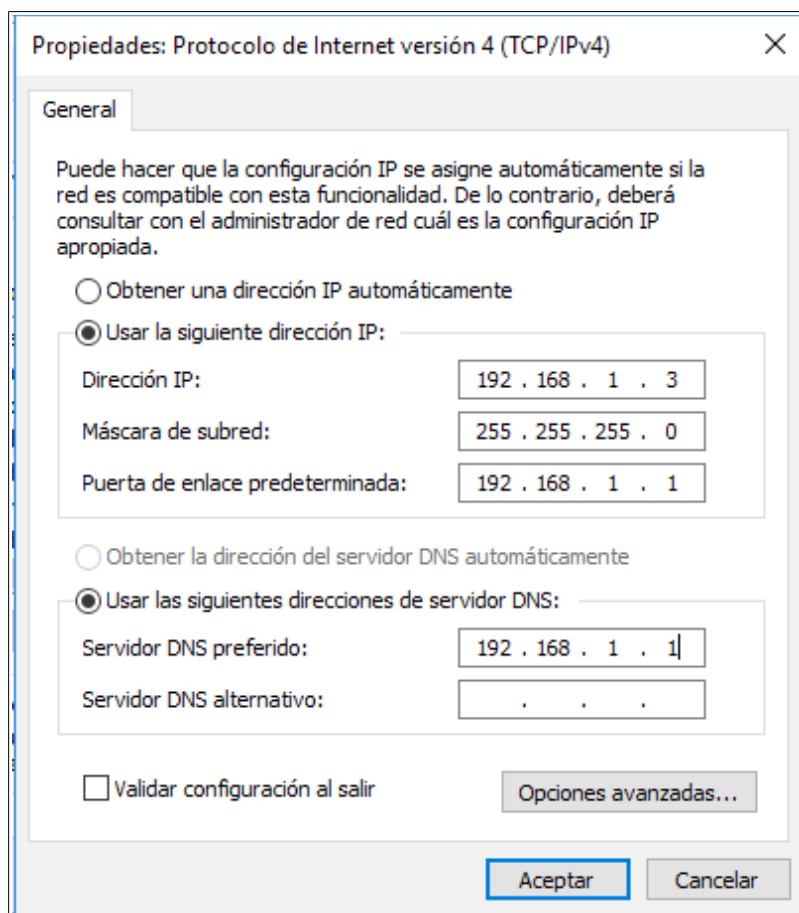
Now click on **CHANGE ADAPTER OPTIONS** and in the new windows click with the right button on **ETHERNET** and then click on **PROPERTIES**.



Select **Internet Protocol version 4** in the new window and click on **PROPERTIES** again:



Finally we write the IP address, netmask, the default gateway and the DNS server:



Click **ACCEPT** and the network configuration will be changed. To check it we will open a console and type **ipconfig**:

```
C:\Windows\system32>ipconfig

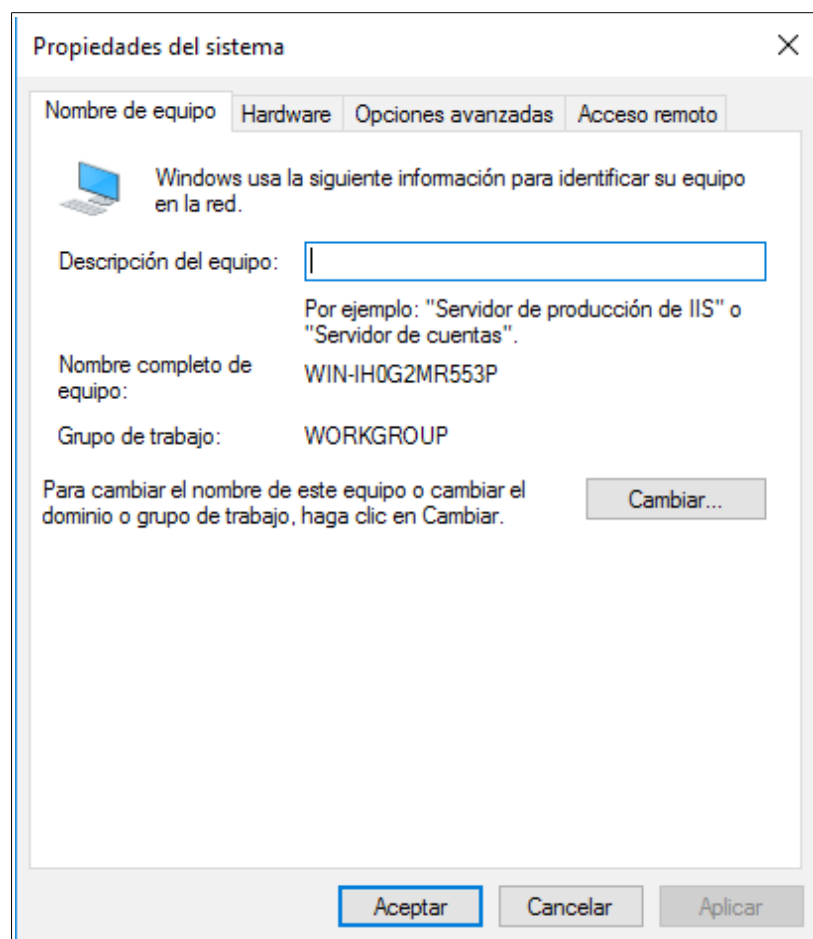
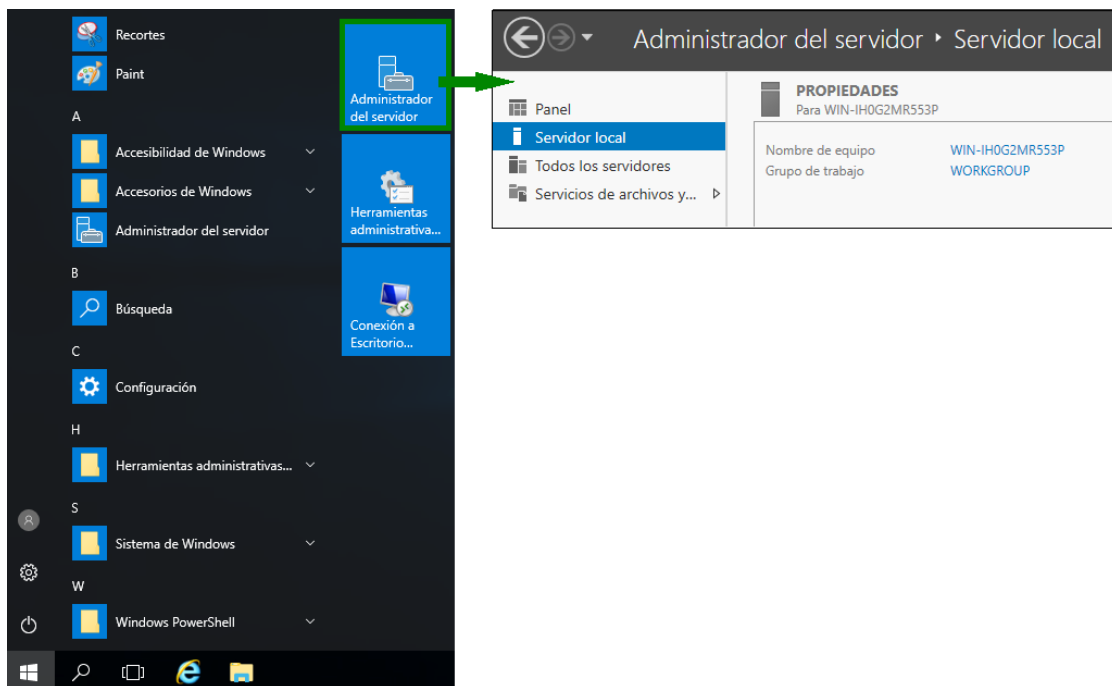
Configuración IP de Windows

Adaptador de Ethernet Ethernet:

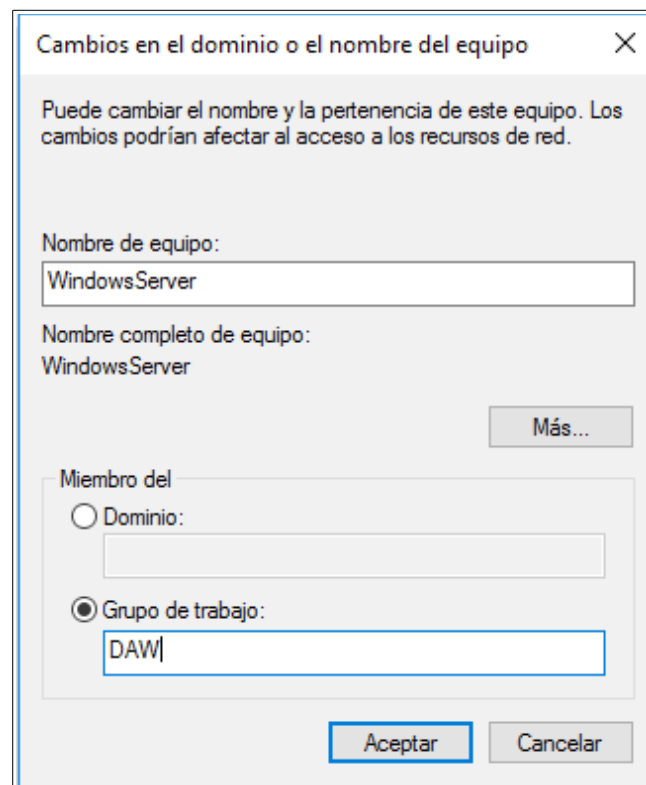
    Sufijo DNS específico para la conexión. . . :
    Vínculo: dirección IPv6 local. . . : fe80::c03e:87d4:1753:757%14
    Dirección IPv4. . . . . : 192.168.1.3
    Máscara de subred . . . . . : 255.255.255.0
    Puerta de enlace predeterminada . . . . . : 192.168.1.1
```

Finally, we are going to change the hostname to WindowServer. And the workgroup to DAW.

For it, go to **START MENU > SERVER ADMINISTRATOR**. Then click on **LOCAL SERVER** and click on the hostname:



Click **CHANGE** and in the new window change the hostname and the workgroup:




Click **ACCEPT** and reboot the system.

3.3 Configuring LinuxClient

The process is the same as LinuxServer, but in this case the ip address of the machine is 192.168.1.4 and the hostname is LinuxClient.

4. CHECK THE CONFIGURATION

Let's check that the virtual machines can communicate among them. For it, we are going to start session in each one and to do a **ping** to the others. If you do not have enough RAM you will have to start only two machines at the same time.

 **ping** is a computer network administration software utility used to test the reachability of a host on an Internet Protocol (IP) network. It measures the round-trip time for messages sent from the originating host to a destination computer that are echoed back to the source.

To stop a **ping** you have to type **Ctrl+C**

Start session at LinuxServer and write in the terminal:

ping 192.168.1.1

ping 192.168.1.3

ping 192.168.1.4

Look at that you do not do a ping to 192.168.1.2 because is the same machine and it will always work.

Do it the same with the other virtual machines.

You will see that some pings fail because of Windows Firewall.

For example:

It works:

```
administrador@LinuxServer:~$ ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data.
64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 time=3.89 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 time=4.94 ms
64 bytes from 192.168.1.1: icmp_seq=3 ttl=64 time=3.09 ms
^C
--- 192.168.1.1 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 3.091/3.975/4.942/0.761 ms
administrador@LinuxServer:~$
```

It does not work:

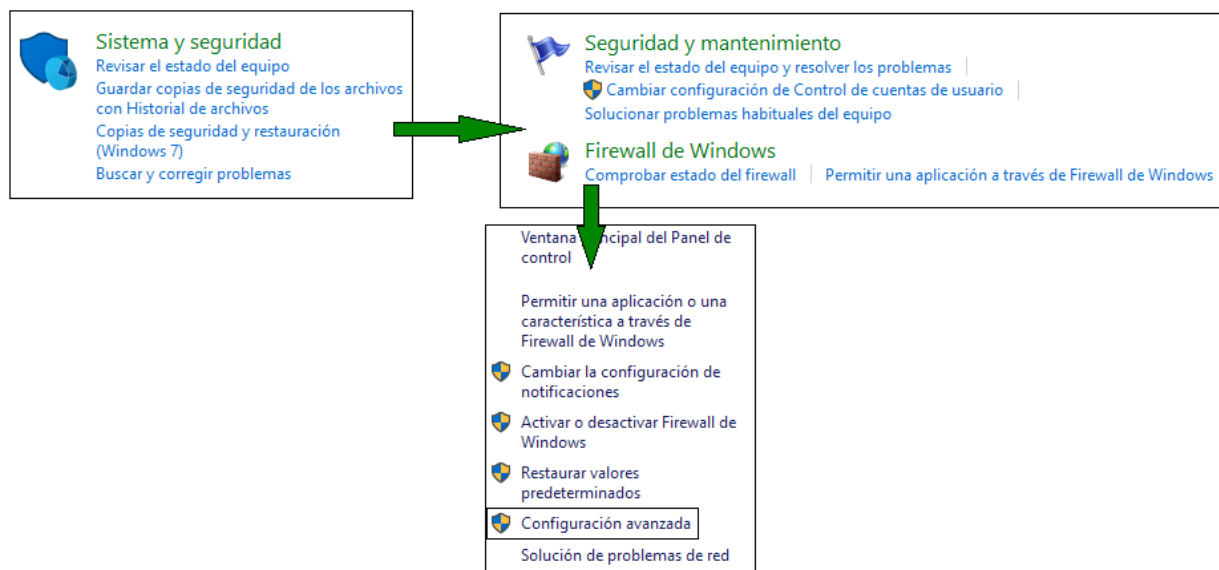
```
administrador@LinuxServer:~$ ping 192.168.1.3
PING 192.168.1.3 (192.168.1.3) 56(84) bytes of data.
^C
--- 192.168.1.3 ping statistics ---
3 packets transmitted, 0 received, 100% packet loss, time 2015ms

administrador@LinuxServer:~$
```

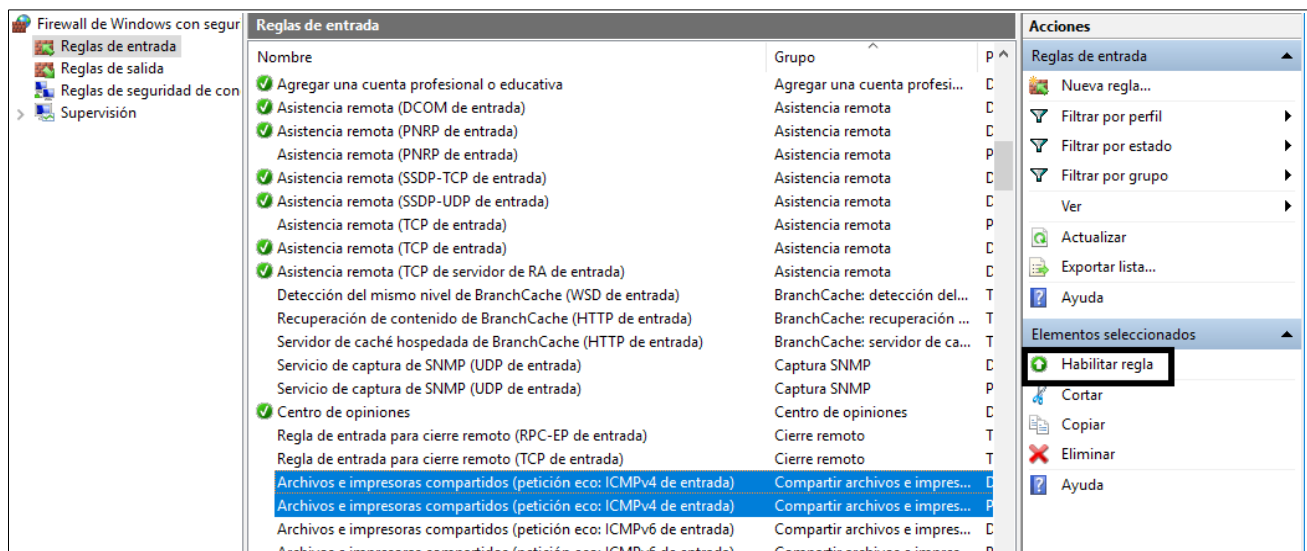
4.1 Activate the ping in the firewall of Windows

Linux allows to execute ping command without problems, but Windows have it disabled by the firewall. For that, you have to click with the right button of the mouse on **START MENU** and then **CONTROL PANEL**.

Then you have to go to **SYSTEM AND SECURITY > WINDOWS FIREWALL > ADVANCED CONFIGURATION**.

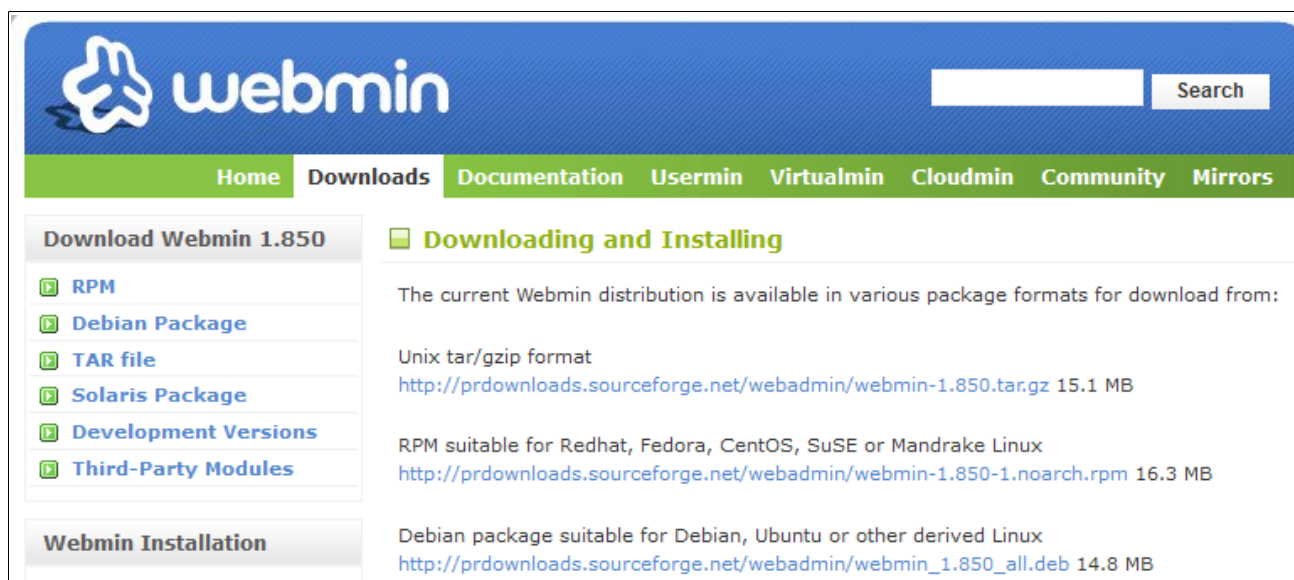


Finally you have to choose **INPUT RULES**, select **FILES AND PRINTS SHARED (ICMP4 INPUT)** and click on **ENABLE RULE**.



5. INSTALLING WEBMIN

As says the documentation of Webmin (<http://www.webmin.com/deb.html>), to install Webmin we can download the file from the download page (we do this in *LinuxServer*):



or run this command (the version can change):

```
wget http://prdownloads.sourceforge.net/webadmin/webmin_1.881_all.deb
```

and then: **sudo dpkg --install webmin_1.881_all.deb**

🔊 If you have problems with dpkg because it is blocked you have to run:
sudo rm /var/lib/dpkg/lock and try again.

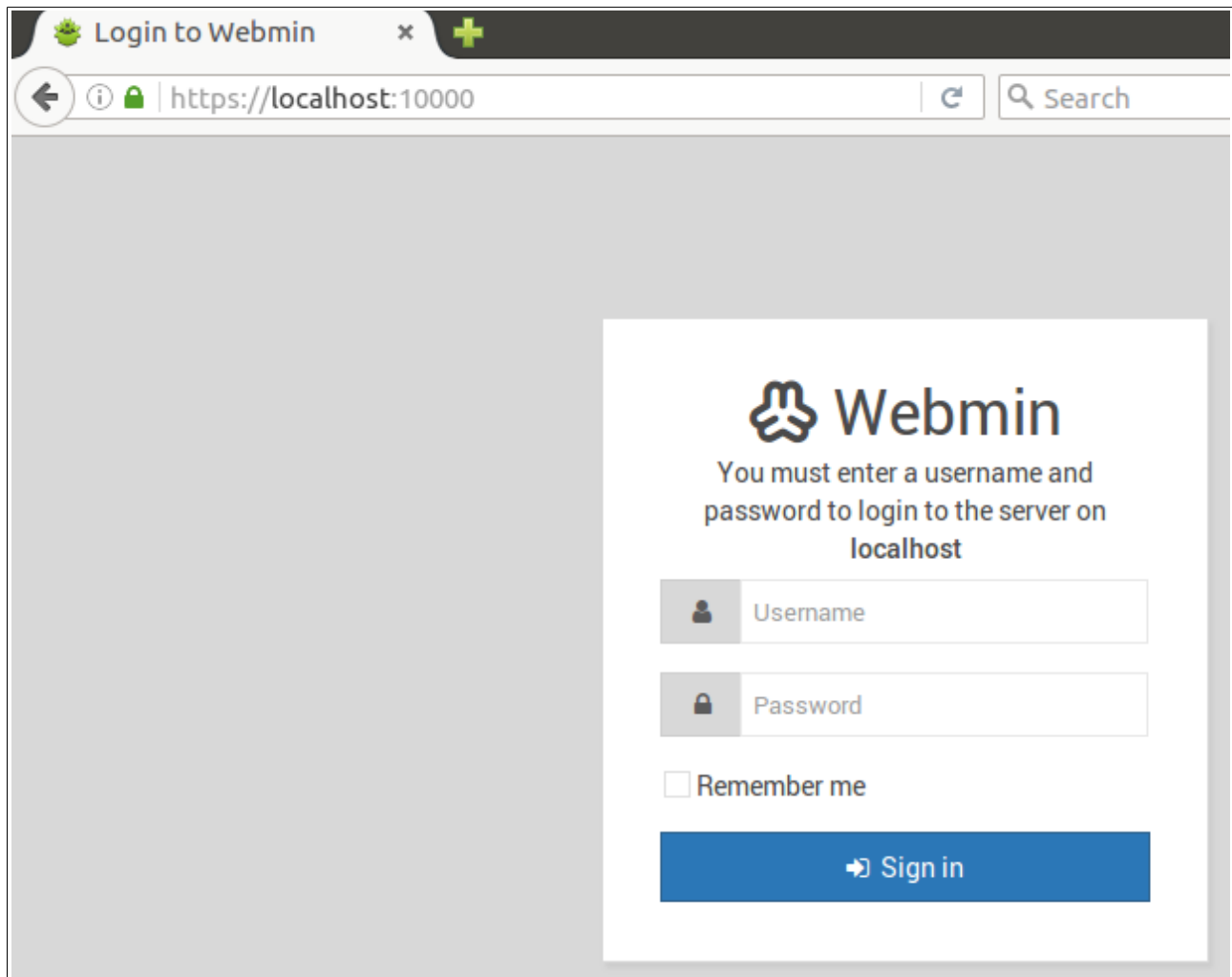
If you do not have all the needed dependencies installed you have to install them:

```
sudo apt-get install perl libnet-ssleay-perl openssl libauthen-pam-perl libpam-runtime libio-pty-perl apt-show-versions python
```

If you have problems with the installation maybe you have to run: **sudo apt-get -f install** to finish it.

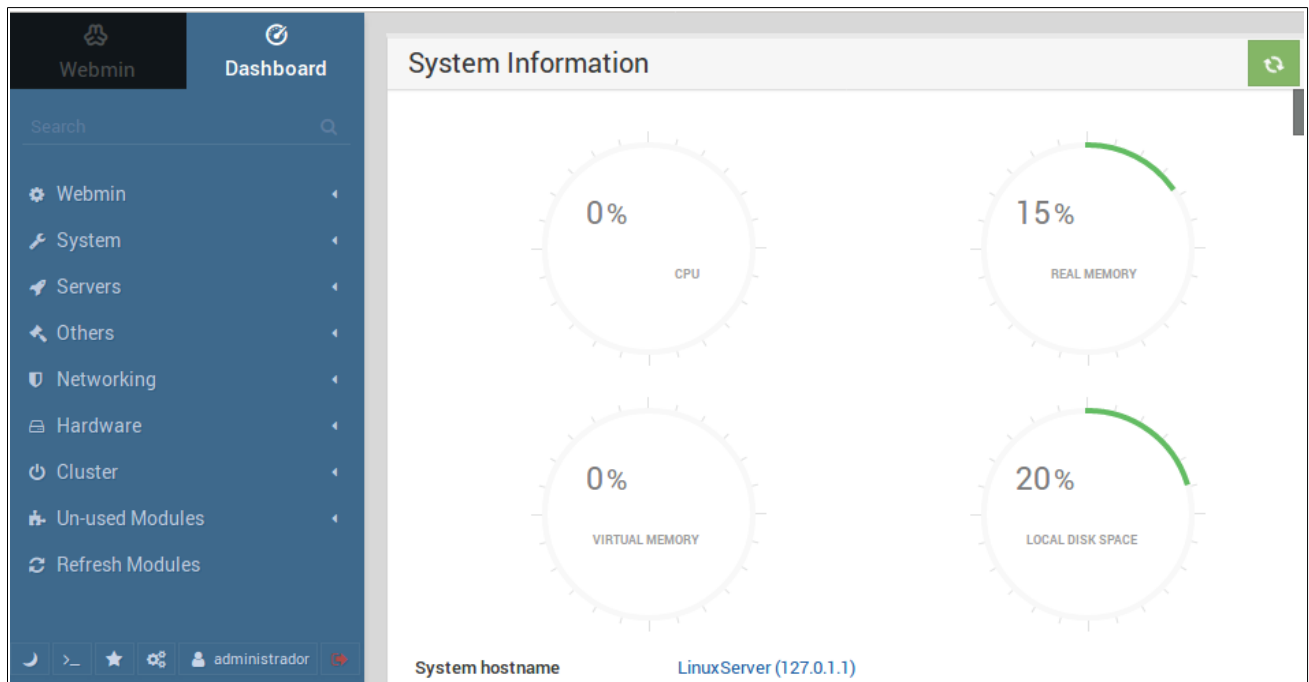
To run Webmin we have to go to the url <https://localhost:10000> (we have to accept the certificate).

The username and the password are the same as in the machine. In my case, administrador/admindaw.



⚡ If the Webmin server doesn't respond, you might need to adjust firewall settings to allow port 10000. (<http://doxfer.webmin.com/Webmin/Installation>)

and we will be inside it:



If we want to connect it from other virtual machine, for instance from *LinuxClient*, we will have to write the URL: <https://192.168.1.2:10000>

The screenshot shows a web browser window with the title 'Login to Webmin'. The address bar displays 'https://192.168.1.2:10000'. The main content area features the Webmin logo and the text 'You must enter a username and password to login to the server on 192.168.1.2'. Below this, there are two input fields: 'Username' and 'Password'. A checkbox labeled 'Remember me' is also present. At the bottom, there is a blue button labeled 'Sign in'.

5.1 Parts of Webmin

The main window gives us the system information about our machine: hostname, OS, version, processor, etc.

Webmin has more than 100 modules and all of them can be found in the left menu grouped as:

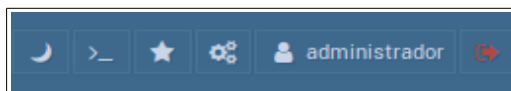
- Webmin
- System
- Servers
- Others
- Networking
- Hardware
- Cluster
- Un-used Modules: contains all the modules not installed.

We have all the modules explained in the official documentation: http://doxfer.webmin.com/Webmin/Webmin_Modules

In this unit we will learn about the first module: Webmin. It has 6 modules:

- Backup Configuration Files
- Change Language and Theme
- Webmin Actions Log
- Webmin Configuration
- Webmin Servers Index
- Webmin Users

Also in the bottom of the menu we have several buttons:



From left to right: change the mode (day or night), open the terminal, add to favorites, theme configuration, edit user and sign out.

5.1.1 Backup Configuration Files


In this module we can do backups of any module installed in Webmin and restore them. Also, we can schedule a backup. Let's see how to do it.

Backup configuration now

Modules to backup

- ☐ ADSL Client
- ☐ Apache Webserver
- ☐ BIND DNS Server
- ☐ Bacula Backup System
- ☐ Bandwidth Monitoring
- ☐ Bootup and Shutdown

Backup destination

☒ Local file 
☐ FTP server file on server
 Login as user with password
 Server port ☒ Default ☐
☐ SSH server file on server
 Login as user with password
 Server port ☒ Default ☐
☐ Download in browser

☐ Webmin module configuration files ☒ Server configuration files ☐ Other listed files ..

Include in backup

Backup Now

To do a backup we have to follow these steps:

1. Click on the **Backup now** tab.
2. In the **Modules to backup** list, select the modules you want to backup config files for, such as **Users and Groups**. Multiple modules can be selected by ctrl-clicking.
3. In the **Backup destination** field, select **Local file** and enter a path to write the backup to. This should be given a **tar.gz** extension, as that is the file format used.
4. Click the **Backup Now** button.

To do a scheduled backup we have to follow these steps:

1. Click on the **Scheduled backups** tab.
2. Click the **Add a new scheduled backup** link, which will open the form shown below.
3. Select the modules whose config files you want to include from the **Modules to backup** list.
4. Enter a local or remote file destination in the **Backup destination** section.
5. If you want to be notified about the status of this backup, enter your email address in the **Email result to address** field.
6. In the **Scheduled backup enabled?** field select **Yes**, and choose the times and days for the backup to run from the Cron time selector below it.

7. Click the **Create** button.

[Backup now](#) [Scheduled backups](#) [Restore now](#)

No scheduled backups have been defined yet.

[+ Add a new scheduled backup](#)

[←](#)

☆ Create Scheduled Backup

▼ Scheduled backup options

Modules to backup

ADSL Client
Apache Webserver
BIND DNS Server
Bacula Backup System
Bandwidth Monitoring
Bootup and Shutdown
CGS

Backup destination

☒ Local file

☐ FTP server file on server
Login as user with password
Server port ☒ Default ☐

☐ SSH server file on server
Login as user with password
Server port ☒ Default ☐

☐ Webmin module configuration files ☒ Server configuration files ☐ Other listed files ..

Include in backup

▶ Pre and post backup commands

▶ Backup schedule

[+ Create](#)

▼ Pre and post backup commands

Pre-backup command

Post-backup command

▼ Backup schedule

Email result to address

When to send email

☒ Always
☐ Only when an error occurs

Scheduled backup enabled?

☐ No
☒ Yes, at times selected below ..

☐ Simple schedule ..

Hourly

☒ Times and dates selected below ..

Minutes

☐ All
☒ Selected ..

0	12	24	36	48
1	13	25	37	49
2	14	26	38	50
3	15	27	39	51
4	16	28	40	52
5	17	29	41	53
6	18	30	42	54
7	19	31	43	55
8	20	32	44	56
9	21	33	45	57
10	22	34	46	58
11	23	35	47	59

Hours

☐ All
☒ Selected ..

0	12
1	13
2	14
3	15
4	16
5	17
6	18
7	19
8	20
9	21
10	22
11	23

Days

☒ All
☐ Selected ..

1	13	25
2	14	26
3	15	27
4	16	28
5	17	29
6	18	30
7	19	31
8	20	
9	21	
10	22	
11	23	
12	24	

Months

☒ All
☐ Selected ..

January
February
March
April
May
June
July
August
September
October
November
December

Weekdays

☒ All
☐ Selected ..

Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

And to restore a backup we have to follow these steps:

1. Click on the **Restore now** tab.
2. Select the module or modules whose config files you want to restore from the **Modules to restore** menu.
3. In the **Restore from** section, enter the path to a local or remote file that was originally created by this module. To be useful, it must contain backups for the modules that you selected above.
4. Click the **Restore Now** button.

Restore configuration now

Modules to restore

ADSL Client

Apache Webserver

BIND DNS Server

Bacula Backup System

Bandwidth Monitoring

Bootup and Shutdown

CGFS

Other files to restore

Restore from

☒ Local file

☐ FTP server

file on server

Login as user

with password

Server port

☒ Default ☐

☐ SSH server

file on server

Login as user

with password

Server port

☒ Default ☐

☐ Uploaded file

Apply configurations?

☒ Yes ☐ No

Just show what will be restored?

☐ Yes ☒ No

Restore Now

5.1.2 Change Language and Theme

In this module we can change the language and the theme.

★ Change Language and Theme

This module can be used to change the language that modules are displayed in and the theme that controls Webmin's appearance, for your Webmin account only.

Webmin UI language

☒ Global language .. English US (en.UTF-8) ☐ Personal choice .. Afrikaans (AF)

Webmin UI theme

☒ Global theme (Authentic Theme) ☐ Personal choice .. Old Webmin Theme

Make Changes

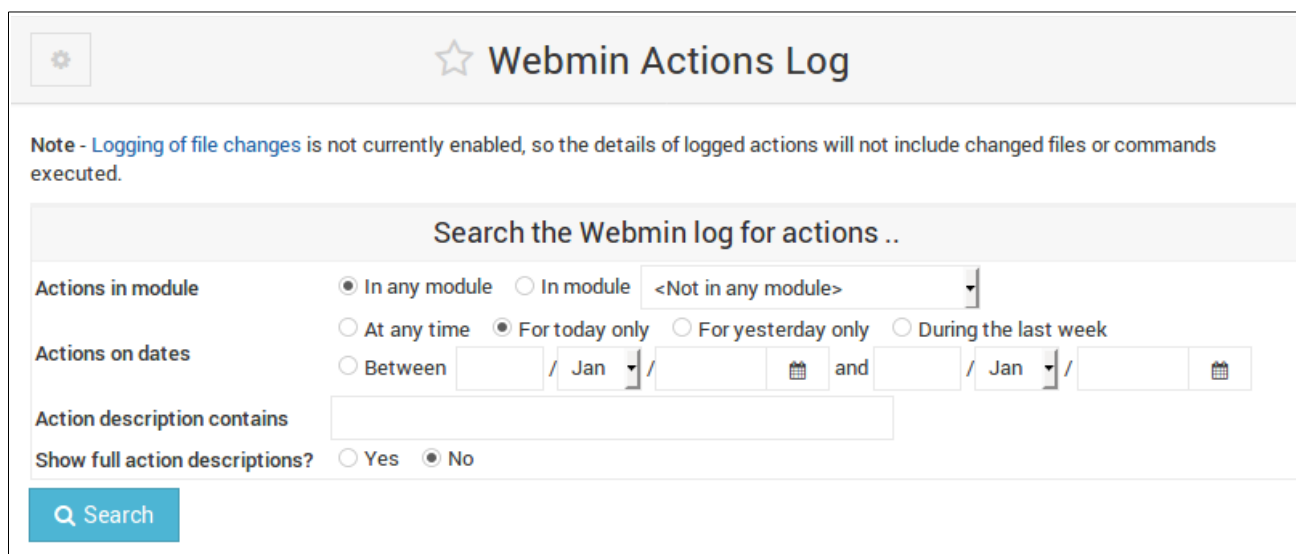
5.1.3 Webmin Actions Log

When logging is enabled, Webmin will record every action taken using it that has some effect on your system, such as the creation of a user or the changing of an Apache setting.

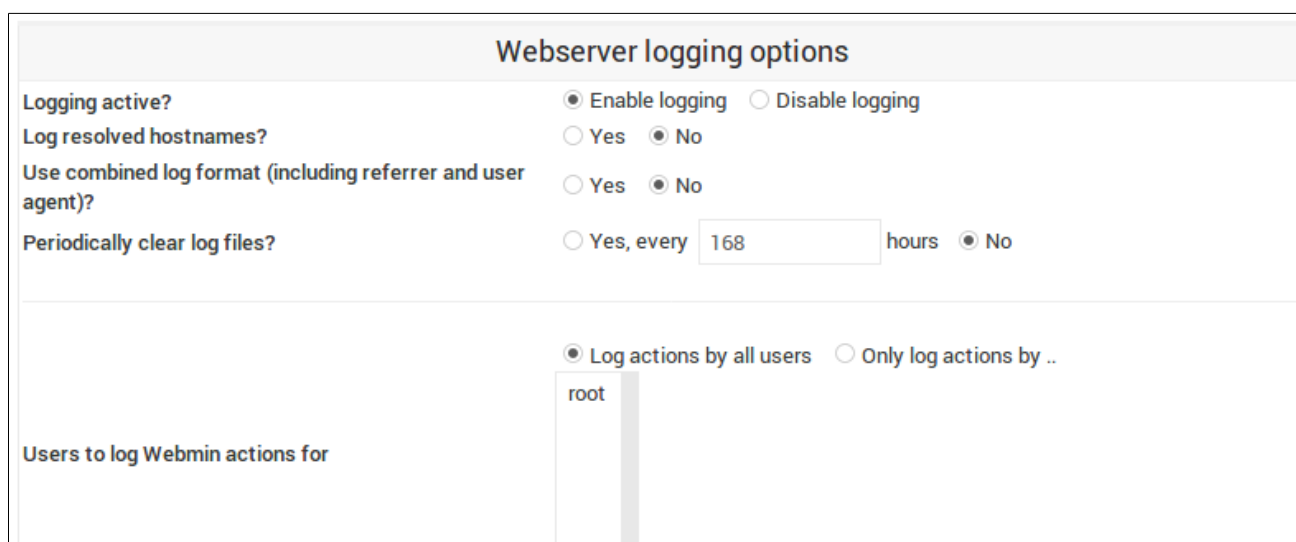
Pages that do not actually change anything on your system, such as those that just display icons, list users or show the current settings for some object will not write anything to the action log.

With this module we can get all of this modifications.

First of all, if we see a note warning that the logging is not enabled:



we have to click on it and enabled it. For that, check that the **Enable logging** radiobutton (the first one) is enabled and click on the button **Save**.



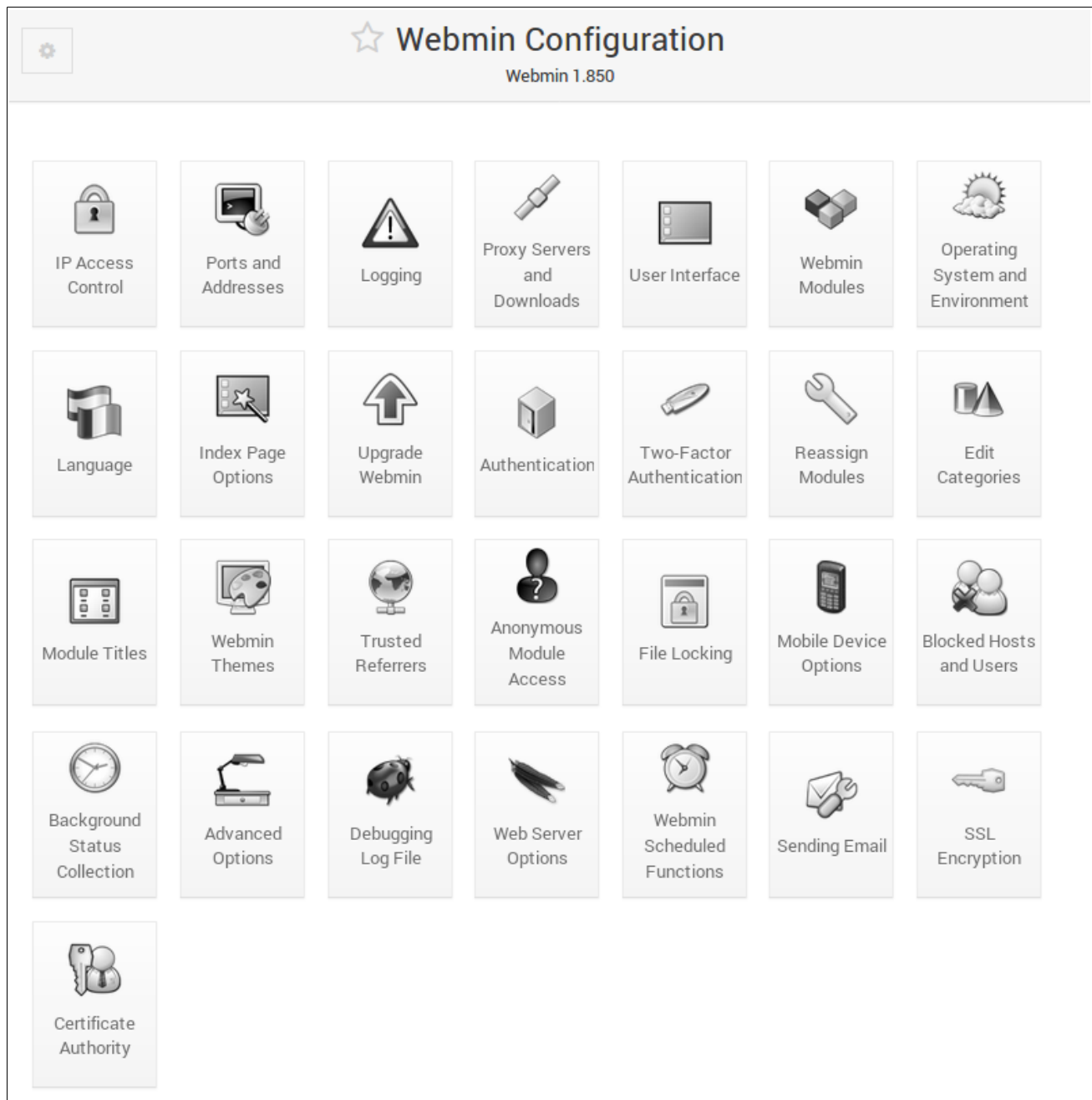
Now, we can search for any action made in Webmin.

5.1.4 Webmin Configuration

This is the module to configure all Webmin, in it we can block users, control the IP access, change the language, etc.


All of them are explained in http://doxfer.webmin.com/Webmin/Webmin_Configuration.

We will see them in next units.



5.1.5 Webmin Servers Index

This module allows us to create a master index of other systems running Webmin on our network and define systems which can be controlled by a master Webmin server. We will not use it but you can read about it in http://doxfer.webmin.com/Webmin/Webmin_Servers_Index.



Webmin Servers

No servers have been registered.

Click this button to automatically find any Webmin servers on your local network.

Click this button to check every address on the network for Webmin servers.

Default login for servers

Default password

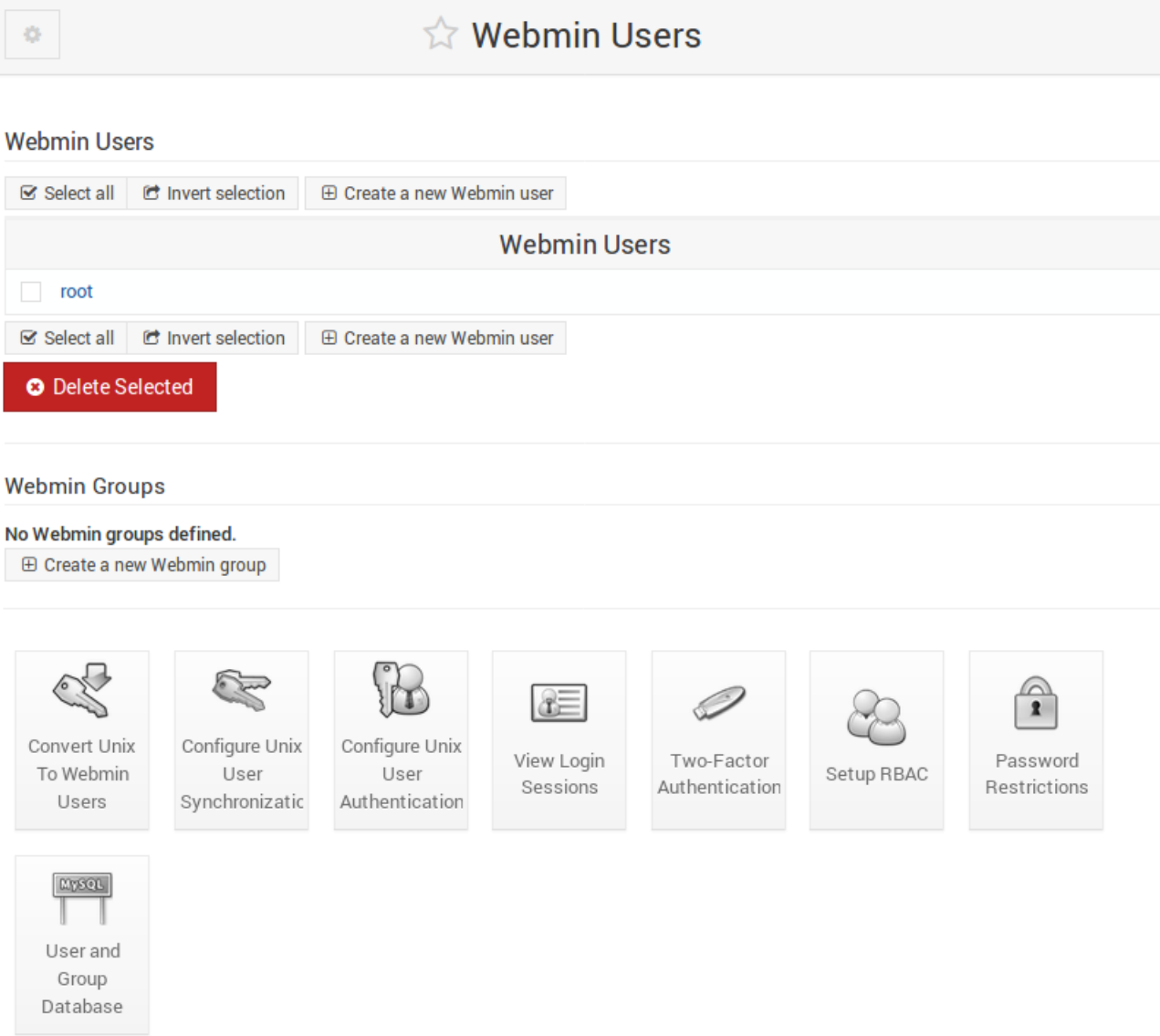
Webmin port

10000

Click this button to setup the automatic periodic discovery of new Webmin servers on your network.


5.1.6 Webmin Users

In this module we can work with the users and groups in Webmin (create new users, groups, manage them, etc.).




The screenshot shows the Webmin Users management interface. At the top, there's a header with a star icon and the text "Webmin Users". Below this, the "Webmin Users" section contains a table with one user, "root", which is selected. Above the table are buttons for "Select all", "Invert selection", and "Create a new Webmin user". Below the table are buttons for "Select all", "Invert selection", "Create a new Webmin user", and a red "Delete Selected" button. The "Webmin Groups" section below it states "No Webmin groups defined." and has a "Create a new Webmin group" button. At the bottom, there's a row of seven icons with labels: "Convert Unix To Webmin Users", "Configure Unix User Synchronizatic", "Configure Unix User Authentication", "View Login Sessions", "Two-Factor Authentication", "Setup RBAC", and "Password Restrictions". A separate box on the left contains a MySQL icon and the text "User and Group Database".

If we want to create a new user we have to click on the *Create a new Webmin user* button and we will have this form:



☆ Create Webmin User



▼ Webmin user access rights

Username

Password

Set to ..


☐ Force change at next login

Real name


▶ User interface options

▶ Security and limits options


▶ Available Webmin modules

 Create

In it we will write the user name and the password. Also, we could set the language or the UI theme



☆ Create Webmin User



▶ Webmin user access rights

▼ User interface options

SSL certificate name

☒ None ☐

Language

☒ Default ☐ Afrikaans (AF)

Categorise modules?


☐ Yes ☐ No ☒ Default

Personal UI theme


☒ From Webmin Configuration ☐ Old Webmin theme

▶ Security and limits options


▶ Available Webmin modules

 Create

or set a minimum password length, ip access control,



☆ Create Webmin User



▶ Webmin user access rights

▶ User interface options

▼ Security and limits options

Inactivity logout time ☒ Default ☐ minutes

Minimum password length ☒ Default ☐ letters

☒ Allow from all addresses ☐ Only allow from listed addresses ☐ Deny from listed addresses


IP access control

Allowed days of the week ☒ Every day ☐ Only selected days ..


☐ Sunday ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday

Allowed times of the day ☒ Any time ☐ From : to :

or set the modules that will be available for the user.



☆ Create Webmin User



▶ Webmin user access rights

▶ User interface options

▶ Security and limits options

▼ Available Webmin modules

☒ Select all ☐ Invert selection

Webmin

☐ Backup Configuration Files ☐ Change Language and Theme

☐ Scheduled Webmin Functions ☐ Usermin Configuration

☐ Webmin Actions Log ☐ Webmin Configuration

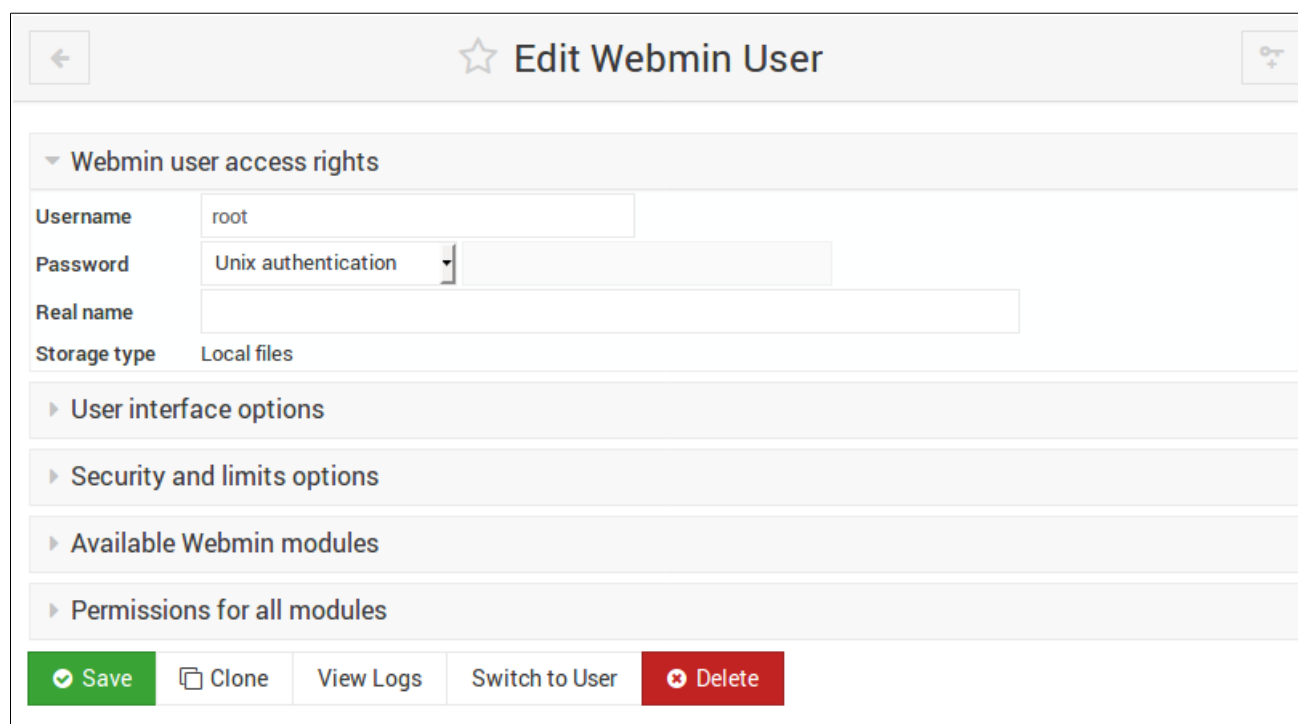
☐ Webmin Servers Index ☐ Webmin Users

System

☐ Bacula Backup System ☐ Bootup and Shutdown

☐ Change Passwords ☐ Disk Quotas

Also, we can change options of created users. For instance, if we click on our user **root** we will see the same form:



← ☆ Edit Webmin User +

▼ Webmin user access rights

Username

Password

Real name

Storage type Local files

▸ User interface options

▸ Security and limits options

▸ Available Webmin modules

▸ Permissions for all modules

✓ Save Clone View Logs Switch to User Delete

Here we can change the password. We can see that we are using a Unix authentication, this mean that it uses the password of our machine. If you change it to **Set to...** you can set a new one.

You can read about the other options in the documentation:
http://doxfer.webmin.com/Webmin/Webmin_Users.