



**UNIVERSIDAD
NACIONAL
AUTÓNOMA DE
MEXICO**



**FACULTAD DE ESTUDIOS SUPERIORES
ARAGÓN**

“Proyecto Final”

ORGANIZAC.Y ADMON.CENTROS COMPUTO.

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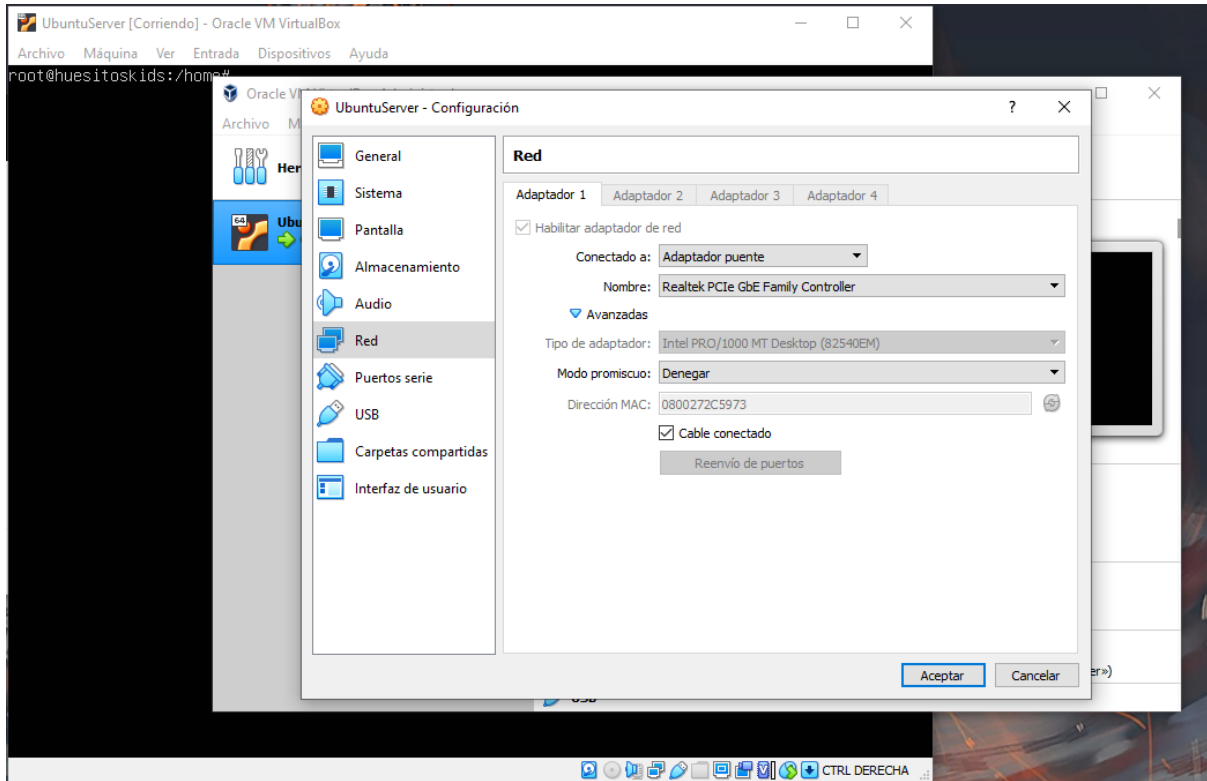
Grupo:

2809

CICLO ESCOLAR: 2021-II

ssh usuario@182.249.60.247

Se configura virtual box para que nos asigne una ip dentro de nuestra red local



instalación net tools

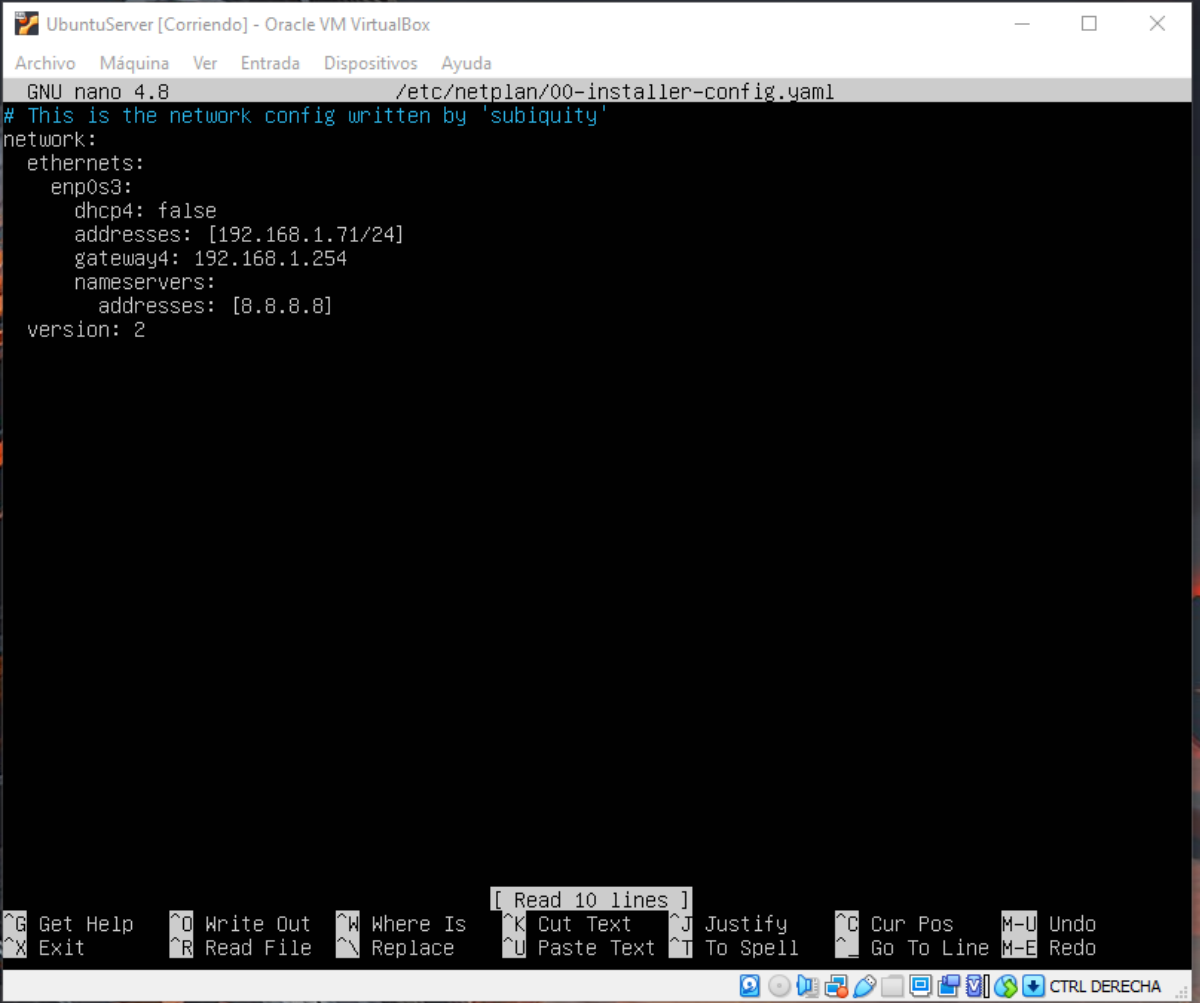
```
root@ninioshuesos:/etc/ssh# sudo apt install net-tools
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 116 not upgraded.
Need to get 196 kB of archives.
After this operation, 864 kB of additional disk space will be used.
Get:1 http://mx.archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git20180626.aebd88e-1ubuntu1 [196 kB]
Fetched 196 kB in 1s (198 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 71201 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20180626.aebd88e-1ubuntu1_amd64.deb ...
Unpacking net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
root@ninioshuesos:/etc/ssh# o_
```

ip asignada por virtualbox:

```
root@ninioshuesos:/etc/ssh# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fe6d:94b prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:6d:09:4b txqueuelen 1000 (Ethernet)
    RX packets 827 bytes 1108125 (1.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 734 bytes 53985 (53.9 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 114 bytes 9362 (9.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 114 bytes 9362 (9.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Se crea ip fija:



The screenshot shows a terminal window titled "UbuntuServer [Corriendo] - Oracle VM VirtualBox". The terminal is running the nano text editor, editing the file `/etc/netplan/00-installer-config.yaml`. The content of the file is as follows:

```
GNU nano 4.8 /etc/netplan/00-installer-config.yaml
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: false
      addresses: [192.168.1.71/24]
      gateway4: 192.168.1.254
      nameservers:
        addresses: [8.8.8.8]
  version: 2
```

At the bottom of the terminal, there is a status bar with various keyboard shortcuts and a message that says "[Read 10 lines]". The shortcuts include: `^G` Get Help, `^X` Exit, `^O` Write Out, `^R` Read File, `^W` Where Is, `^H` Replace, `^K` Cut Text, `^U` Paste Text, `^J` Justify, `^T` To Spell, `^C` Cur Pos, `^_` Go To Line, `M-U` Undo, and `M-E` Redo. On the far right, it says "CTRL DERECHA".

Se abren puertos para la ip fija:

No.	Descripción	IP LAN	Tipo de protocolo	Puerto LAN	Puerto publico	Habilitar	Modificar/Borrar
1	puerto 22	192.168.1.71(PC192-168-1-71)	TCP&UDP	22	22	Habilitado	<input type="button" value="Modificar"/> <input type="button" value="Borrar"/>
2	puerto 1194	192.168.1.71(PC192-168-1-71)	TCP&UDP	1194	1194	Habilitado	<input type="button" value="Modificar"/> <input type="button" value="Borrar"/>
3	puerto 80	192.168.1.71(PC192-168-1-71)	TCP&UDP	80	80	Habilitado	<input type="button" value="Modificar"/> <input type="button" value="Borrar"/>

ip ya fijada:

```
root@huesitoskids:/home# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.71 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::a00:27ff:fe2c:5973 prefixlen 64 scopeid 0x20<link>
    inet6 2806:107e:15:4e00:a00:27ff:fe2c:5973 prefixlen 64 scopeid 0x0<global>
    ether 08:00:27:2c:59:73 txqueuelen 1000 (Ethernet)
    RX packets 151693 bytes 129339979 (129.3 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 42125 bytes 4160341 (4.1 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 186 bytes 16006 (16.0 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 186 bytes 16006 (16.0 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@huesitoskids:/home# _
```

Instalamos ssh

con el comando apt-get install openssh

Creamos nuevos usuarios de ubuntu server

adduser username

Dar permiso de administrador a usuarios ubuntu.

usermod -aG sudo nombredeusuario.

Se instala apache con el comando:

apt-get install apache2

Se configura firewall

```
root@huesitoskids:/etc/apache2/sites-available# ufw app list
Available applications:
  Apache
  Apache Full
  Apache Secure
  OpenSSH
root@huesitoskids:/etc/apache2/sites-available# ufw allow Apache
Rule added
Rule added (v6)
root@huesitoskids:/etc/apache2/sites-available# ufw status
Status: active

To                Action            From
--                -
22                ALLOW            Anywhere
22/tcp            ALLOW            Anywhere
Apache            ALLOW            Anywhere
22 (v6)           ALLOW            Anywhere (v6)
22/tcp (v6)       ALLOW            Anywhere (v6)
Apache (v6)       ALLOW            Anywhere (v6)

root@huesitoskids:/etc/apache2/sites-available#
```

Comprobamos que apache funcione ingresando con nuestra ip publica del servidor

⚠ No es seguro | 189.249.60.227



Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|-- mods-enabled
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
|   |-- *.conf
|-- sites-enabled
|   |-- *.conf
```

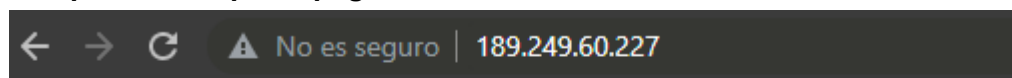
- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.
- They are activated by symlinking available configuration files from their respective `*-available/` counterparts. These should be managed by using our helpers `a2enmod`, `a2dismod`, `a2ensite`, `a2dissite`, and `a2enconf`, `a2disconf`. See their respective man pages for detailed information.
- The binary is called `apache2`. Due to the use of environment variables, in the default configuration, `apache2` needs to be started/stopped with `/etc/init.d/apache2` or `apache2ctl`. **Calling `/usr/bin/apache2` directly will not work** with the default configuration.

Modificamos nuestra página web

ingresando a la dirección var/www/html y editamos el archivo index.html

```
GNU nano 4.8 index.html Modified
<html>
<head>
  <title> Ubuntu Rocks ! </title>
</head>
<body>
<p> Bienvenidos sean todos ustedes a la pagina web sencilla de los huesitos kids_
</body>
</html>
```

Comprobamos que la página se muestre:



Bienvenidos sean todos ustedes a la pagina web sencilla de los huesitos kids

Obtenemos el hash

```
brian@huesitoskids:/var/www/html$ ls
index.html
brian@huesitoskids:/var/www/html$ shasum -a 256 index.html
7e92dff26f79fae7155017745bdf0db5ef7af4cd1a86fb96f91b8fd1fec74b4e  index.html
```

Descargamos nuestro archivo index.html por ftp

```
C:\Users\Master>sftp brian@189.249.60.227
brian@189.249.60.227's password:
Connected to 189.249.60.227.
sftp> ls
sftp> pwd
Remote working directory: /home/brian
sftp> cd ..
sftp> cd .
sftp> pwd
Remote working directory: /
sftp> get var/www/html/index.html
Fetching /var/www/html/index.html to index.html
/var/www/html/index.html 100% 162 1.5KB/s 00:00
sftp> exit
```

Creamos un proyecto en Github y clonamos el repositorio del proyecto .

```
Master@DESKTOP-C3I8G0I MINGW64 ~/desktop
$ git clone https://github.com/VictorRuizEst98/ProyectoCentrosDeComputo.git
Cloning into 'ProyectoCentrosDeComputo'...
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 9 (delta 1), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (9/9), done.
Resolving deltas: 100% (1/1), done.
```

Subimos el archivo index al repositorio de Github

```
Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ ls
README.md  index.html

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git add .
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git commit -m "Carga de archivo index.html"
[main 62d91e7] Carga de archivo index.html
1 file changed, 1 insertion(+), 1 deletion(-)

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git add .
bash: git: command not found

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 340 bytes | 340.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/VictorRuizEst98/ProyectoCentrosDeComputo.git
5e794ce..62d91e7  main -> main

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git add .

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git commit -m "Carga de archivo Integridad del Index"
[main 0a74a35] Carga de archivo Integridad del Index
1 file changed, 2 insertions(+)
create mode 100644 IntegridaddeIndex.txt

Master@DESKTOP-C3I8G0I MINGW64 ~/desktop/ProyectoCentrosDeComputo (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 427 bytes | 427.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/VictorRuizEst98/ProyectoCentrosDeComputo.git
62d91e7..0a74a35  main -> main
```

Descargamos el index.html desde github para comprobar su integridad

brayan-mendoza Carga de archivo Integridad del Index ✖ 0a74a35 43 seconds ago 🕒 5 commits		
Integridad del Index.txt	Carga de archivo Integridad del Index	43 seconds ago
README.md	Update README.md	1 hour ago
index.html	Carga de archivo index.html	4 minutes ago

Comprobamos su integridad comparando con lo obtenido anteriormente.

```
MINGW64:/c/Users/Super Daniel Boy/Desktop/ProyectoCentrosDeComputo... — □ ✕  
Super Daniel Boy@DESKTOP-0SD22GM MINGW64 ~ (master)  
$ cd Desktop/  
  
Super Daniel Boy@DESKTOP-0SD22GM MINGW64 ~/Desktop (master)  
$ cd ProyectoCentrosDeComputo-main/  
  
Super Daniel Boy@DESKTOP-0SD22GM MINGW64 ~/Desktop/ProyectoCentrosDeComputo-main (master)  
$ shasum -a 256 index.html  
7e92dff26f79fae7155017745bdf0db5ef7af4cd1a86fb96f91b8fd1fec74b4e *index.html  
  
Super Daniel Boy@DESKTOP-0SD22GM MINGW64 ~/Desktop/ProyectoCentrosDeComputo-main (master)  
$ |
```

SHA de la pagina

7e92dff26f79fae7155017745bdf0db5ef7af4cd1a86fb96f91b8fd1fec74b4e index.html