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# LINUX

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Tarea #988



**Asignatura:**

Sistemas Operativos

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1.- Asumir el prompt de superusuario

**sudo su**

```
bernardo@bernardo-VirtualBox:~$ sudo su
[sudo] contraseña para bernardo:
root@bernardo-VirtualBox:/home/bernardo#
```

2.- Cambiar el password del superusuario

**sudo passwd**

```
root@bernardo-VirtualBox:/home/bernardo# sudo passwd
Nueva contraseña:
Vuelva a escribir la nueva contraseña:
passwd: contraseña actualizada correctamente
root@bernardo-VirtualBox:/home/bernardo#
```

3.- Listar el directorio raíz

**ls /**

```
root@bernardo-VirtualBox:/home/bernardo# ls /
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  sys  usr
```

4.- Cambiarse al directorio raíz

**cd /**

```
root@bernardo-VirtualBox:/home/bernardo# cd /
root@bernardo-VirtualBox:/#
```

5.- Verificar el directorio actual

**pwd**

```
root@bernardo-VirtualBox:/# pwd
/
root@bernardo-VirtualBox:/#
```

6.- Crear un directorio “prueba” en /home

**sudo mkdir /home/prueba**

```
root@bernardo-VirtualBox:/# sudo mkdir /home/prueba
root@bernardo-VirtualBox:/#
```

7.- Crear un archivo “test” en directorio /home/prueba

**sudo touch /home/prueba/test**

```
root@bernardo-VirtualBox:/# sudo touch /home/prueba/test
root@bernardo-VirtualBox:/#
```

8.- Verificar el usuario actual

**whoami**

```
root@bernardo-VirtualBox:/# whoami
root
root@bernardo-VirtualBox:/#
```

9.- Mostrar el contenido del archivo /root/.bash\_history

**cat /root/.bash\_history**

```
root@bernardo-VirtualBox:/# cat /root/.bash_history
passwd
ls/
ls /
cd /
pwd
mkdir /home/prueba
touch /home/prueba/test
whoami
cat /root/.bash_history
cat /root/.bash_history
cat /root/.bash_history
cat /root/.bash_history
cat /root/.bash_history
cat /root/.bash_history
clear
cat /root/.bash_history
sudo rm /home/prueba
sudo rm -r prueba
ls /
cd /
pwd
sudo mkdir /home/prueba
sudo touch /home/prueba/test
whoami
cat /root/.bash_history
sudo cp /home/prueba/test /root/
```

10.- Copiar el archivo “test” a /root

`sudo cp /home/prueba/test /root/`

```
root@bernardo-VirtualBox:/# sudo cp /home/prueba/test /root/
root@bernardo-VirtualBox:/#
```

11.- Eliminar el archivo “test” de home/prueba

`sudo rm /home/prueba/test`

```
root@bernardo-VirtualBox:/# sudo rm /home/prueba/test
root@bernardo-VirtualBox:/#
```

12.- Mover /root/test a la raiz

`sudo mv /root/test /`

```
root@bernardo-VirtualBox:/# sudo mv /root/test /
root@bernardo-VirtualBox:/#
```

13.- Hacer un ping a www.google.com

`ping www.google.com`

```
root@bernardo-VirtualBox:/# sudo mv /root/test /
root@bernardo-VirtualBox:/# ping www.google.com
PING www.google.com (142.250.105.104) 56(84) bytes of data.
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=1 ttl=109 time=37.0 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=2 ttl=109 time=32.9 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=3 ttl=109 time=33.6 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=4 ttl=109 time=33.1 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=5 ttl=109 time=33.0 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=6 ttl=109 time=33.9 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=7 ttl=109 time=34.1 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=8 ttl=109 time=32.7 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=9 ttl=109 time=32.6 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=10 ttl=109 time=32.0 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=11 ttl=109 time=32.2 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=12 ttl=109 time=32.8 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=13 ttl=109 time=32.0 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=14 ttl=109 time=33.3 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=15 ttl=109 time=467 ms
64 bytes from yt-in-f104.1e100.net (142.250.105.104): icmp_seq=16 ttl=109 time=33.3 ms
^C
--- www.google.com ping statistics ---
16 packets transmitted, 16 received, 0% packet loss, time 15523ms
rtt min/avg/max/mdev = 32.004/60.379/467.315/105.076 ms
root@bernardo-VirtualBox:/#
```

14.- Mostrar la configuracion de red del servidor

`ifconfig`

```
root@bernardo-VirtualBox:/# 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::1f8e:d164:793:127e prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:ab:82:40 txqueuelen 1000 (Ethernet)
    RX packets 44588 bytes 64910444 (64.9 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 11841 bytes 893018 (893.0 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 (Bucle local)
    RX packets 516 bytes 50699 (50.6 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 516 bytes 50699 (50.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@bernardo-VirtualBox:/#
```

## 15.- Usar el comando netstat

### netstat -tuln

```
root@bernardo-VirtualBox:/# netstat
Conexiones activas de Internet (servidores w/o)
Proto Recib Enviad Dirección local Dirección remota Estado
udp 0 0 bernardo-Virtual:bootpc _gateway:bootps ESTABLECIDO
Sockets activos de dominio UNIX (servidores w/o)
Proto RefCnt Flags Type State I-Node Ruta
unix 3 [ ] DGRAM CONECTADO 17931 /run/systemd/notify
unix 2 [ ] DGRAM 29685 /run/user/1000/systemd/notify
unix 2 [ ] DGRAM 17946 /run/systemd/journal/syslog
unix 18 [ ] DGRAM 17956 /run/systemd/journal/dev-log
unix 8 [ ] DGRAM CONECTADO 17960 /run/systemd/journal/socket
unix 3 [ ] FLUJO CONECTADO 37018 /run/user/1000/bus
unix 3 [ ] FLUJO CONECTADO 33787
```

```
root@bernardo-VirtualBox:/# netstat -tuln
Conexiones activas de Internet (solo servidores)
Proto Recib Enviad Dirección local Dirección remota Estado
tcp 0 0 127.0.0.53:53 0.0.0.0:* ESCUCHAR
tcp 0 0 127.0.0.1:631 0.0.0.0:* ESCUCHAR
tcp6 0 0 :::1:631 :::* ESCUCHAR
udp 0 0 0.0.0.0:631 0.0.0.0:*
udp 0 0 127.0.0.53:53 0.0.0.0:*
udp 0 0 0.0.0.0:5353 0.0.0.0:*
udp 0 0 0.0.0.0:35184 0.0.0.0:*
udp6 0 0 :::5353 :::*
udp6 0 0 :::56738 :::*
root@bernardo-VirtualBox:/#
```

## 16.- Usar el comando top

### top

```
Tareas: 187 total, 1 ejecutar, 186 hibernar, 0 detener, 0 zombie
%Cpu(s): 4.9 usuario, 7.3 sist, 0.0 adecuado, 87.8 inact, 0.0 en espera, 0.0 hardw in
MiB Mem : 1963.9 total, 130.3 libre, 962.9 usado, 870.7 búfer/caché
MiB Intercambio: 455.6 total, 246.1 libre, 209.5 usado, 823.3 dispon Mem
```

PID	USUARIO	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	HORA+	ORDEN
20808	root	20	0	21864	3912	3268	R	5.3	0.2	0:00.03	top
1	root	20	0	103648	11612	7624	S	0.0	0.6	0:06.07	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.01	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	slub_flushwq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-event+
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_rude_
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_trace
13	root	20	0	0	0	0	S	0.0	0.0	0:00.76	ksoftirqd/0
14	root	20	0	0	0	0	I	0.0	0.0	0:02.91	rcu_sched
15	root	rt	0	0	0	0	S	0.0	0.0	0:00.04	migration/0
16	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/0
18	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/1
20	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/1
21	root	rt	0	0	0	0	S	0.0	0.0	0:00.47	migration/1
22	root	20	0	0	0	0	S	0.0	0.0	0:00.34	ksoftirqd/1

```
root@bernardo-VirtualBox:/#
```

17.- Usar el comando traceroute

**traceroute www.google.com**

```
root@bernardo-VirtualBox:/# traceroute www.google.com
traceroute to www.google.com (172.253.124.104), 30 hops max, 60 byte packets
 1  _gateway (10.0.2.2)  3.603 ms  3.251 ms  3.189 ms
 2  * * *
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  * * *
 8  * * *
 9  * * *
10  * * *
11  * * *
12  * * *
13  * * *
14  * * *
15  * * *
16  * * *
17  * * *
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
```

18.- Usar el comando nslookup

**nslookup www.google.com**

```
root@bernardo-VirtualBox:/# nslookup www.google.com
Server:          127.0.0.53
Address:         127.0.0.53#53

Non-authoritative answer:
Name:   www.google.com
Address: 172.253.124.99
Name:   www.google.com
Address: 172.253.124.103
Name:   www.google.com
Address: 172.253.124.106
Name:   www.google.com
Address: 172.253.124.147
Name:   www.google.com
Address: 172.253.124.105
Name:   www.google.com
Address: 172.253.124.104
Name:   www.google.com
Address: 2607:f8b0:4002:c02::67
Name:   www.google.com
Address: 2607:f8b0:4002:c02::63
Name:   www.google.com
Address: 2607:f8b0:4002:c02::68
Name:   www.google.com
Address: 2607:f8b0:4002:c02::93

root@bernardo-VirtualBox:/#
```