

Universidad Politécnica de Quintana  
Roo



UNIVERSIDAD  
POLITÉCNICA  
DE QUINTANA ROO

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Formando Triunfadores

Ingeniería en software 27 Av

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Materia : Sistema Operativos

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1. Asumir el prompt de superusuario:

```
yoshuacanche@Debian:~$ sudo su
[sudo] password for yoshuacanche:
root@Debian:/home/yoshuacanche# exit
exit
yoshuacanche@Debian:~$ sudo su
root@Debian:/home/yoshuacanche# passwd root
```

2. Cambiar el password de superusuario:

```
yoshuacanche@Debian:~$ sudo su
root@Debian:/home/yoshuacanche# passwd root
New password:
Retype new password:
passwd: password updated successfully
```

3. Listar directorio raíz:

```
root@Debian:/home/yoshuacanche# ls
actividad  Documents  Menu       Pictures  Templates
Desktop    Downloads  Music      Public    Videos
```

4. Cambiar al directorio raíz:

```
root@Debian:/home/yoshuacanche# cd /
```

5. Verificar el directorio actual

```
root@Debian:/# pwd
/
```

6. Crear un directorio "prueba" en /home

```
root@Debian:/# sudo mkdir /home/prueba
```

8. Crear un archivo "test" en directorio/home/prueba

```
root@Debian:/# touch /home/prueba/test
```

9. Verificar el usuario actual

```
root@Debian:/# whoami
root
```

10. Mostrar el contenido del archivo /root/.bash\_history

```
root@Debian:/# sudo cat /root/.bash_history
nano /etc/sudoers
EXIT
exit
exit
exit
exit
exit
exit
exit
```

11. Copiar el archivo "test" a /root

```
root@Debian:/# sudo cp /home/prueba/test /root/
```

12. Eliminar el archivo "test" de /home/prueba

```
root@Debian:/# rm /home/prueba/test
```

13. Mover /root/test a la raíz

```
root@Debian:/# sudo mv /root/test /
```

14. Hacer un ping a www.google.com

```
root@Debian:/# ping www.google.com
PING www.google.com (142.250.189.132) 56(84) bytes of data.
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=1 ttl=116 time=86.3
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=2 ttl=116 time=337 r
s
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=3 ttl=116 time=84.8
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=4 ttl=116 time=161 r
s
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=5 ttl=116 time=27.9
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=6 ttl=116 time=98.7
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=7 ttl=116 time=47.0
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=8 ttl=116 time=25.8
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=9 ttl=116 time=121 r
s
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=10 ttl=116 time=138
ms
64 bytes from mia09s26-in-f4.1e100.net (142.250.189.132): icmp_seq=11 ttl=116 time=147
```

15. Mostrar la configuración de red del servidor

```
root@Debian:/# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen
1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group def
ault qlen 1000
    link/ether 08:00:27:78:fd:85 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 84869sec preferred_lft 84869sec
    inet6 fe80::a00:27ff:fe78:fd85/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
root@Debian:/# netstat -tuln
```

16. Usar el comando netstat

```

root@Debian:/# netstat -natu
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 127.0.0.1:631          0.0.0.0:*               LISTEN
tcp        0      0 10.0.2.15:55964        199.232.34.132:80      TIME_WAIT
tcp6       0      0 :::1:631                :::*                    LISTEN
udp        0      0 0.0.0.0:631            0.0.0.0:*               *
udp        0      0 0.0.0.0:36557          0.0.0.0:*               *
udp        0      0 10.0.2.15:68           10.0.2.2:67            ESTABLISHED
udp        0      0 0.0.0.0:5353           0.0.0.0:*               *
udp6       0      0 :::57900                :::*                    *
udp6       0      0 :::5353                 :::*                    *
root@Debian:/# top

```

## 17. Usar el comando top

```
root@Debian:/# top
```

```

top - 18:52:48 up 1:48, 2 users, load average: 0.24, 0.11, 0.03
Tasks: 161 total, 1 running, 160 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 1967.0 total, 105.9 free, 1009.9 used, 1029.8 buff/cache
MiB Swap: 975.0 total, 974.5 free, 0.5 used. 957.0 avail Mem

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	168048	12696	9168	S	0.0	0.6	0:02.49	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.04	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
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	I	0.0	0.0	0:00.00	rcu_tasks_kthr+
12	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_rude+
13	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_trac+
14	root	20	0	0	0	0	S	0.0	0.0	0:12.76	ksoftirqd/0
15	root	20	0	0	0	0	I	0.0	0.0	0:02.29	rcu_preempt

## 18. Usar el comando traceroute

```

root@Debian:/# traceroute
Usage:
  traceroute [ -4dFItnreAUDV ] [ -f first_ttl ] [ -g gate,... ] [ -i device ] [ -m max_
_ttl ] [ -N squeries ] [ -p port ] [ -t tos ] [ -l flow_label ] [ -w MAX,HERE,NEAR ] [
-q nqueries ] [ -s src_addr ] [ -z sendwait ] [ --fwmark=num ] host [ packetlen ]
Options:
  -4                      Use IPv4
  -6                      Use IPv6
  -d --debug              Enable socket level debugging
  -F --dont-fragment      Do not fragment packets
  -f first_ttl --first=first_ttl
                          Start from the first_ttl hop (instead from 1)
  -g gate,... --gateway=gate,...
                          Route packets through the specified gateway
                          (maximum 8 for IPv4 and 127 for IPv6)
  -I --icmp               Use ICMP ECHO for tracerouting
  -T --tcp                Use TCP SYN for tracerouting (default port is 80)
  -i device --interface=device

```

## 19. Usar el comando nslookup

```
root@Debian:/# nslookup
>
>
> root@Debian:/#
root@Debian:/# █
```