

A)

```
Applications Places System Parrot Terminal
File Edit View Search Terminal Help
[parrot@parrot]~$ ping --help
ping: invalid option -- '-'
Usage:
ping [options] <destination>
Options:
<destination>    dns name or ip address
-a              use audible ping
-A              use adaptive ping
-b              sticky source address
-c <count>       stop after <count> replies
-D             print timestamps
-d             use SO_DEBUG socket option
-f             flood ping
-h             print help and exit
-I <interface>  either interface name or address
-l <interval>   seconds between sending each packet
-L             suppress loopback of multicast packets
-l <preload>    send <preload> number of packages while waiting replies
-m <mark>       tag the packets going out
-M <mtud opt>  define mtu discovery, can be one of <do|dont|want>
-n             no dns name resolution
-o             report outstanding replies
-p <pattern>    contents of padding byte
-q             quiet output
-t <ttl>        use quality of service <ttl> bits
-s <size>       use <size> as number of data bytes to be sent
-S <size>       use <size> as SO_SNDBUF socket option
-t <ttl>        define time to live
-U             print user-to-user latency
-v             verbose output
-V             print version and exit
-W <deadline>   reply wait <deadline> in seconds
-W <timeout>   time to wait for response

But options:
Menu Parrot Terminal [Descargue su archivo ...] Untitled2 - LibreOffice ...
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File Edit View Search Terminal Help
[parrot@parrot]~$ ping -c 4 127.0.0.1
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data:
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=12.4 ms
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.028 ms
64 bytes from 127.0.0.1: icmp_seq=3 ttl=64 time=0.406 ms
64 bytes from 127.0.0.1: icmp_seq=4 ttl=64 time=0.032 ms

--- 127.0.0.1 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3112ms
rtt min/avg/max/mdev = 0.028/3.225/12.436/5.319 ms
[parrot@parrot]~$ ping -c 4 localhost
PING localhost (localhost (:::1)) 56 data bytes
64 bytes from localhost (:::1): icmp_seq=1 ttl=64 time=0.698 ms
64 bytes from localhost (:::1): icmp_seq=2 ttl=64 time=0.116 ms
64 bytes from localhost (:::1): icmp_seq=3 ttl=64 time=0.162 ms
64 bytes from localhost (:::1): icmp_seq=4 ttl=64 time=0.296 ms

--- localhost ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3215ms
rtt min/avg/max/mdev = 0.116/0.318/0.698/0.229 ms
[parrot@parrot]~$ nslookup
Server:      8.8.8.8
Address:     8.8.8.8#53

** server can't find https://upgroo.edu.mx/: NXDOMAIN
[parrot@parrot]~$ nslookup upgroo.edu.mx
Server:      8.8.8.8
Address:     8.8.8.8#53

Non-authoritative answer:
[parrot@parrot]~$
```

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Applications Places System ParrotTerminal
File Edit View Search Terminal Help
[~]-[x]-[parrot@parrot]-[~]-
$nslookup upgroo.edu.mx
Server: 8.8.8.8
Address: 8.8.8.8#53

Non-authoritative answer:
Name: upgroo.edu.mx
Address: 77.68.126.20

[~]-[parrot@parrot]-[~]-
$man netstat
[~]-[parrot@parrot]-[~]-
$netstat -tln
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
tcp 0 0 10.0.2.2:67 0.0.0.0* ESTABLISHED

[~]-[parrot@parrot]-[~]-
$netstat -n
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
udp 0 0 10.0.2.15:68 0.0.0.0*

Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags Type State I-Node Path
unix 3 [ ] STREAM CONNECTED 24716 /run/user/1000/bus
unix 3 [ ] STREAM CONNECTED 21321 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 22032 /run/dbus/system_bus_socket
unix 2 [ ] DGRAM CONNECTED 23629
unix 3 [ ] STREAM CONNECTED 23537
unix 3 [ ] STREAM CONNECTED 23527
unix 3 [ ] STREAM CONNECTED 22489
unix 3 [ ] STREAM CONNECTED 22282
unix 3 [ ] STREAM CONNECTED 21832
unix 3 [ ] STREAM CONNECTED 22417
unix 2 [ ] DGRAM CONNECTED 12189
unix 3 [ ] STREAM CONNECTED 53380 /run/user/1000/at-spi-bus_0
unix 3 [ ] STREAM CONNECTED 24056
unix 3 [ ] STREAM CONNECTED 24582 /run/dbus/system_bus_socket
unix 3 [ ] STREAM CONNECTED 22277 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 21283
```

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Applications Places System ParrotTerminal
File Edit View Search Terminal Help
parrot 3223 14.0 4.0 2486676 162768 ? SL 00:58 0:03 /usr/lib/fire
parrot 3317 0.5 1.6 2396212 65428 ? SL 00:58 0:00 /usr/lib/fire
parrot 3322 0.4 1.6 2396212 65744 ? SL 00:58 0:00 /usr/lib/fire
parrot 3354 0.5 1.6 2396212 65460 ? SL 00:58 0:00 /usr/lib/fire
root 3407 0.2 0.0 0 0 ? I 00:58 0:00 [worker/u8:1
root 3408 0.0 0.0 0 0 ? I 00:58 0:00 [worker/u8:3
root 3409 0.0 0.0 0 0 ? I 00:58 0:00 [worker/u8:4
root 3410 0.0 0.0 0 0 ? I 00:58 0:00 [worker/u8:5
parrot 3411 0.0 0.0 9868 3456 pts/0 Re 00:58 0:00 ps aux

[~]-[parrot@parrot]-[~]-
$kill 3411
bash: kill: (3411) - No such process

[~]-[x]-[parrot@parrot]-[~]-
$ps aux
USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND
root 1 0.0 0.3 166792 12212 ? Ss Oct12 0:01 /sbin/init splash
root 2 0.0 0.0 0 0 ? S Oct12 0:00 [kthreadd]
root 3 0.0 0.0 0 0 ? I< Oct12 0:00 [rcu_gp]
root 4 0.0 0.0 0 0 ? I< Oct12 0:00 [rcu_par_gp]
root 5 0.0 0.0 0 0 ? I< Oct12 0:00 [slub_flushwq]
root 6 0.0 0.0 0 0 ? I< Oct12 0:00 [netns]
root 8 0.0 0.0 0 0 ? I< Oct12 0:00 [worker/0:0H-event]
root 10 0.0 0.0 0 0 ? I< Oct12 0:00 [mm_percpu_wq]
root 11 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_kthread]
root 12 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_rude_kth
root 13 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_trace_kt
root 14 0.0 0.0 0 0 ? S Oct12 0:00 [ksoftirqd/0]
root 15 0.0 0.0 0 0 ? I Oct12 0:03 [rcu_preempt]
root 16 0.0 0.0 0 0 ? S Oct12 0:00 [migration/0]
root 18 0.0 0.0 0 0 ? S Oct12 0:00 [cpuhp/0]
root 19 0.0 0.0 0 0 ? S Oct12 0:00 [cpuhp/1]
root 20 0.0 0.0 0 0 ? S Oct12 0:00 [migration/1]
root 21 0.0 0.0 0 0 ? S Oct12 0:01 [ksoftirqd/1]
root 23 0.0 0.0 0 0 ? I< Oct12 0:00 [worker/1:0H-event]
root 24 0.0 0.0 0 0 ? S Oct12 0:00 [cpuhp/2]
root 25 0.0 0.0 0 0 ? S Oct12 0:00 [migration/2]
root 26 0.0 0.0 0 0 ? S Oct12 0:00 [ksoftirqd/2]
```

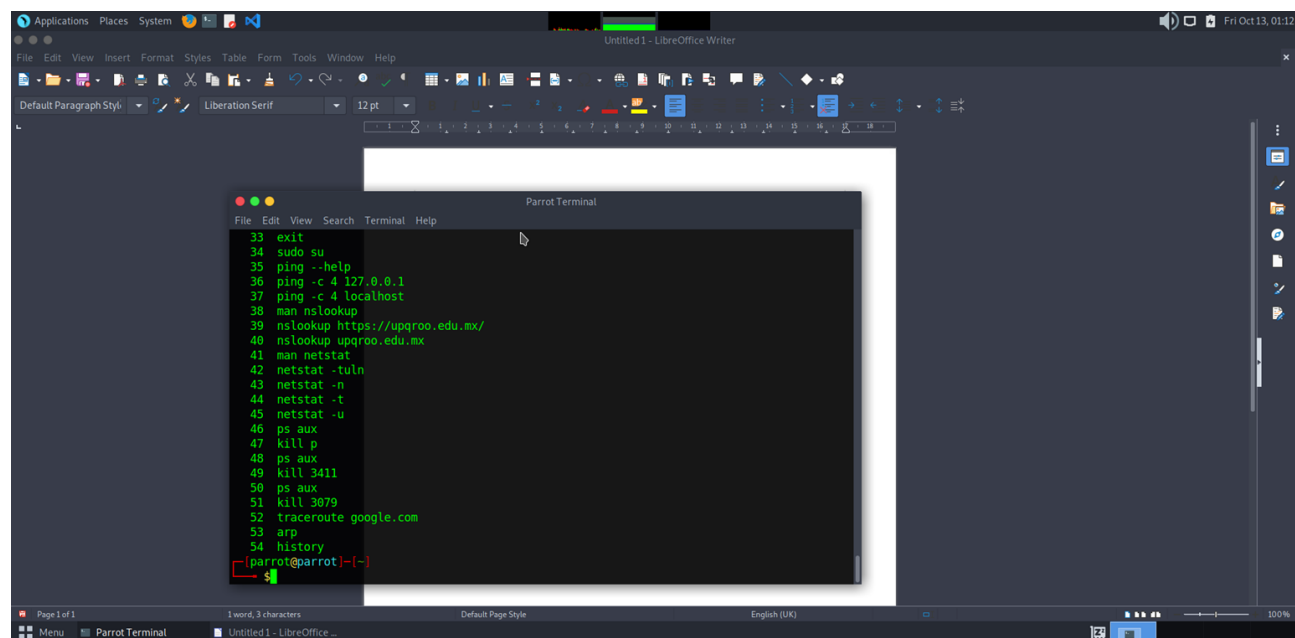
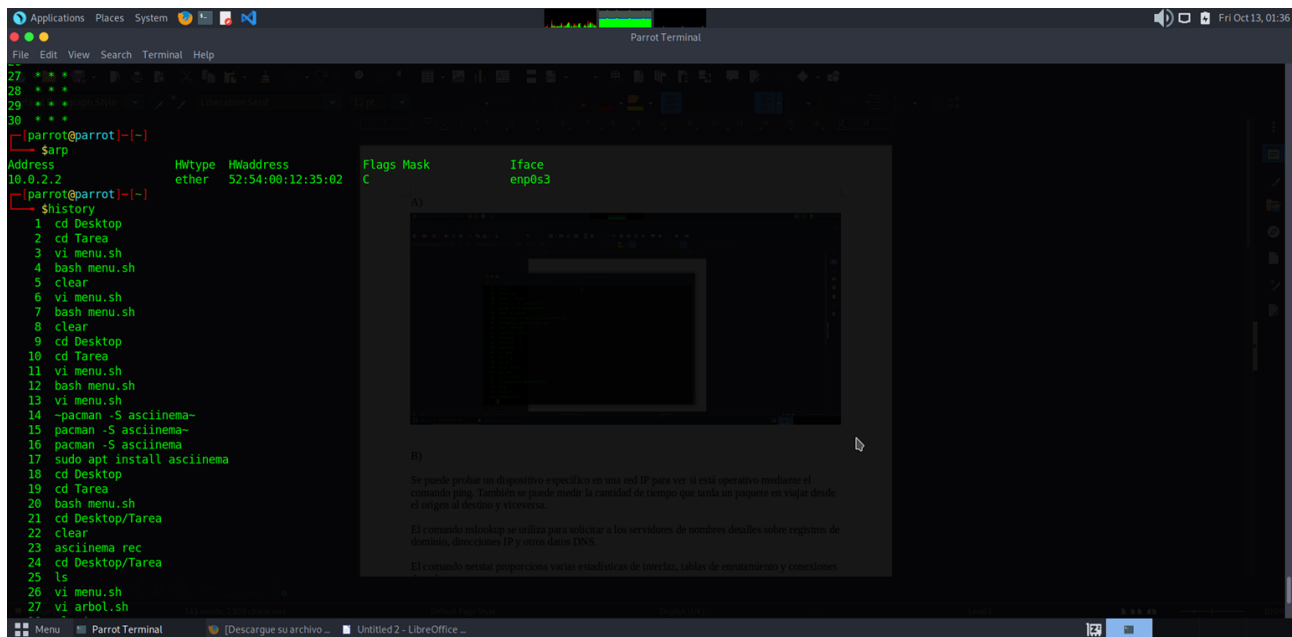
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Applications Places System Parrot Terminal
File Edit View Search Terminal Help
unix 2 [ ] STREAM CONNECTED 22414 @/dbus-vfs-daemon/socket-arc001
unix 3 [ ] STREAM CONNECTED 22414
unix 2 [ ] DGRAM CONNECTED 21163
unix 3 [ ] DGRAM CONNECTED 12223
unix 3 [ ] STREAM CONNECTED 22286
unix 3 [ ] STREAM CONNECTED 20813
unix 3 [ ] STREAM CONNECTED 23544
unix 3 [ ] STREAM CONNECTED 24714 /run/user/1000/pipewire-0
unix 3 [ ] STREAM CONNECTED 22403 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 22034 /run/dbus/system_bus_socket
unix 2 [ ] DGRAM CONNECTED 20790

[parrot@parrot]~$ sstest -t
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
[parrot@parrot]~$ sstest -u
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
udp 0 0 10.0.2.15:bootpc 10.0.2.2:bootps ESTABLISHED

[parrot@parrot]~$ ps aux
USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND
root 1 0.0 0.3 166792 12212 ? Ss Oct12 0:01 /sbin/init sp
root 2 0.0 0.0 0 0 ? S Oct12 0:00 (kthreadd)
root 3 0.0 0.0 0 0 ? I< Oct12 0:00 [rcu_gp]
root 4 0.0 0.0 0 0 ? I< Oct12 0:00 [rcu_par_gp]
root 5 0.0 0.0 0 0 ? I< Oct12 0:00 [slub_flushwq]
root 6 0.0 0.0 0 0 ? I< Oct12 0:00 [netns]
root 8 0.0 0.0 0 0 ? I< Oct12 0:00 [kworker/0:0H]
root 10 0.0 0.0 0 0 ? I< Oct12 0:00 [mm_percpu_wq]
root 11 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_kt]
root 12 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_ru]
root 13 0.0 0.0 0 0 ? I Oct12 0:00 [rcu_tasks_tr]
root 14 0.0 0.0 0 0 ? S Oct12 0:00 [ksoftirqd/0]
root 15 0.0 0.0 0 0 ? I Oct12 0:03 [rcu_preempt]
root 16 0.0 0.0 0 0 ? S Oct12 0:00 [migration/0]
root 18 0.0 0.0 0 0 ? S Oct12 0:00 [cpuhp/0]
```

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Applications Places System Parrot Terminal
File Edit View Search Terminal Help
root 3410 0.0 0.0 0 0 ? R 00:58 0:00 [kworker/u8:5-event]
root 3413 0.0 0.0 0 0 ? I 00:59 0:00 [kworker/u8:6-btrfs]
parrot 3449 0.0 0.0 9868 3508 pts/0 R+ 01:04 0:00 ps aux

[parrot@parrot]~$ kill 3079
[parrot@parrot]~$ traceroute google.com
traceroute to google.com (142.250.217.238), 30 hops max, 60 byte packets
 1 10.0.2.2 (10.0.2.2) 3.811 ms 0.504 ms 0.410 ms
 2 ***
 3 ***
 4 ***
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B)

Se puede probar un dispositivo específico en una red IP para ver si está operativo mediante el comando ping. También se puede medir la cantidad de tiempo que tarda un paquete en viajar desde el origen al destino y viceversa.

El comando nslookup se utiliza para solicitar a los servidores de nombres detalles sobre registros de dominio, direcciones IP y otros datos DNS.

El comando netstat proporciona varias estadísticas de interfaz, tablas de enrutamiento y conexiones de red.

Los procesos del sistema se muestran mediante el comando ps, que es similar a la lista de tareas de Windows.

Cuando un proceso recibe una señal, normalmente termina finalizándose o interrumpiéndose. Esto se logra usando el comando kill.

Ping, nslookup y netstat permiten a los usuarios ver el estado de las conexiones de red, resolver nombres de dominio y confirmar la conectividad a otros dispositivos o sitios web, todo lo cual puede usarse para diagnosticar problemas de red.

C)

- ⑩ **atmadm:** Este comando se utilizaba para mostrar conexiones ATM. No es comúnmente utilizado en versiones modernas de Windows.
- ⑩ **bitsadmin:** Es una herramienta de línea de comandos para administrar trabajos de transferencia creados con Background Intelligent Transfer Service (BITS). Ejemplo: bitsadmin /list
- ⑩ **cmstp:** Es una herramienta para instalar o desinstalar perfiles de administrador de conexión. Ejemplo: cmstp /s
- ⑩ **ftp:** Es el cliente FTP de línea de comandos. Ejemplo para conectarse a un servidor FTP: ftp servername
- ⑩ **hostname:** Muestra el nombre del host de la computadora. Simplemente ejecuta hostname.
- ⑩ **nbtstat:** Muestra estadísticas y configuración actual para un protocolo NetBIOS sobre TCP/IP. Ejemplo: nbtstat -n
- ⑩ **net:** Es una herramienta para administrar usuarios, grupos, y recursos compartidos en la red. Ejemplo para ver todos los usuarios: net user
- ⑩ **pathping:** Combina funciones de ping y tracert. Muestra la ruta hacia un destino y la latencia y pérdida de paquetes para cada salto. Ejemplo: pathping upgro.edu.mx
- ⑩ **tftp:** Cliente de Protocolo de Transferencia de Archivos Trivial. Ejemplo para conectarse a un servidor TFTP: tftp servername.