## Despliegue de Aplicaciones Web.

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## Práctica 2.3 Puertos y conexiones.

1.Inicia sesión en Desarrollo10 con un usuario con privilegios de administrador.

1. Averigua los puertos TCP a la escucha con el comando netstat -a -p TCP -n.

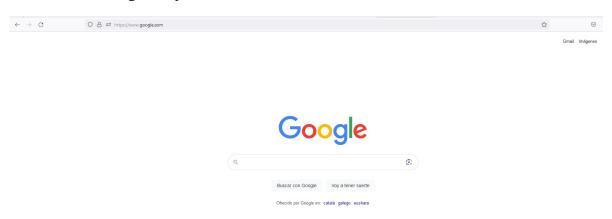
```
equipolinux@Info-A12-PC01:~$ netstat -a -p TCP -n (Not all processes could be identified, non-owned process info
will not be shown, you would have to be root to see it all.)
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address
                                                 Foreign Address
                                                                             State
                                                                                          PID/Program name
                   0 127.0.0.1:3306
                                                 0.0.0.0:*
                                                                             LISTEN
tcp
tcp
                   0 127.0.0.1:33060
                                                 0.0.0.0:*
                                                                             LISTEN
                  0 127.0.0.53:53
                                                 0.0.0.0:*
                                                                             LISTEN
tcp
                  0 :::80
0 0.0.0.0:5353
0 127.0.0.53:53
                                                                             LISTEN
                                                 0.0.0.0:*
udp
           0
                                                 0.0.0.0:*
udp
           0
                   0 127.0.0.1:323
                                                 0.0.0.0:*
udp
udp
                   0 0.0.0.0:41814
                                                 0.0.0.0:*
udp6
                   0 :::5353
udp6
                   0 :::41264
                   0 ::1:323
udp6 0 0::1.525
Active UNIX domain sockets (servers and established)

Type State I-Node
Proto RefCnt Flags
unix 2 [ ACC
                                                                  PID/Program name
                                                                                          Path
                            Type
STREAM
                                        LISTENING
                                                        17627
                                                                                          /run/WSL/2_interop
unix 2
unix 2
unix 2
unix 2
unix 2
              [ ACC
                            STREAM
                                        LISTENING
                                                                                           /run/WSL/1_interop
                            STREAM
                                        LISTENING
                                                        17604
                                                                                           /var/run/dbus/system_bus_socket
                            SEQPACKET
                ACC ]
                                        LISTENING
                                                        19503
                                                                                          /mnt/wslg/weston-notify.sock
                                                                                          /mnt/wslg/runtime-dir/wayland-0
/tmp/.X11-unix/X0
                            STREAM
                                        LISTENING
                                                        20507
unix 2
unix 2
unix 2
                ACC
                                                        20508
                            STREAM
                                        LISTENING
                                        LISTENING
                                                                                          /mnt/wslg/runtime-dir/pulse/native
                            STREAM
                            STREAM
unix
                 ACC
                                        LISTENING
                                                         20516
                                                                                           /mnt/wslg/PulseAudioRDPSource
                ACC ]
unix 2
unix 2
                            STREAM
                                        LISTENING
                                                        17628
                                                                                           /mnt/wslg/PulseAudioRDPSink
                ACC ]
ACC ]
                            DGRAM
                                                        24
                                                                                           /var/run/chrony/chronyd.sock
                                                                                          /mnt/wslg/PulseServer
unix 2
                            STREAM
                                        LISTENING
                                                        22589
unix 2
                            STREAM
                                                                                          /tmp/dbus-C0xLFIP5W4
                                        LISTENING
                                                        26635
unix
                            STREAM
                                        LISTENING
                                                        22641
                                                                                           /run/systemd/resolve/io.systemd.Resolve
                            DGRAM
                                                        29770
                                                                  546/systemd
                                                                                           /run/user/1000/systemd/notify
                ACC ]
unix
                            STREAM
                                        LISTENING
                                                        29773
                                                                  546/systemd
                                                                                           /run/user/1000/systemd/private
                ACC ]
unix
                            STREAM
                                        LISTENING
                                                        29779
                                                                  546/systemd
                                                                                           /run/user/1000/gnupg/S.dirmngr
                                                                                           /run/user/1000/gnupg/S.gpg-agent.browser
                                                                  546/systemd
unix 2
                            STREAM
                                        LISTENING
                                                        29781
                                                                                           /run/systemd/notify
                            DGRAM
unix
                                        CONNECTED
                                                        18859
                ACC ]
unix
                            STREAM
                                        LISTENING
                                                        29783
                                                                  546/systemd
                                                                                           /run/user/1000/gnupg/S.gpg-agent.extra
```

1.2. Averigua los puertos UDP a la escucha con el comando netstat -a -p UDP -n.

```
| Selection | Sele
```

1.3. Abre el navegador y accede a una web de Internet.



a. Muestra la conexiones TCP establecidas con el comando netstat -p TCP -n

```
polinux@Info-Al2-PC61:-$ netstat -p TCP -n
all processes could be identified, non-owned process info
1 not be shown, you would have to be root to see it all.)
ve Internet connections (w/o servers)
o Recv-Q Send-Q Local Address
ve LNITX domain sockets (w/o servers)

0 RefCrt Flags Type State 1-Node PID/
2 [ ] DGRAM 24 -
2 [ ] DGRAM 29770 546/
4 [ ] DGRAM CONNECTED 18859 -
11 [ ] DGRAM CONNECTED 18875 -
7 [ ] DGRAM CONNECTED 18875 -
7 [ ] DGRAM CONNECTED 18875 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            State
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PID/Program name
                                                                                                                                                                                                                                                                                                                                               I-Node PID/Program name
24 - 29778 546/systemd
18859 - 18868 - 18877 - 26742 - 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Path
/var/run/chrony/chronyd.sock
/run/user/1000/systemd/notify
/run/systemd/notify
/run/systemd/journal/syslog
/run/systemd/journal/dev-log
/run/systemd/journal/socket
                                 CONNECTED
                                                                                                                                                                                                                                                                                                                                             18877 -
18877 -
26742 -
27739 -
18843 -
18944 -
22621 -
17352 -
30839 -
552 -
29771 546/systemd
94 -
29775 546/systemd
17642 -
26648 -
28693 -
286510 -
                                                                                                                                                                  DGRAM
STREAM
STREAM
STREAM
DGRAM
STREAM
DGRAM
STREAM
DGRAM
STREAM
DGRAM
STREAM
STREAM
STREAM
STREAM
STREAM
STREAM
STREAM
STREAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /run/dbus/system_bus_socket
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /run/systemd/journal/stdout
                                                                                                                                                                  STREAM
STREAM
STREAM
STREAM
DGRAM
DGRAM
STREAM
STREAM
STREAM
STREAM
STREAM
STREAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /run/dbus/system_bus_socket
                                                                                                                                                                  DGRAM
STREAM
STREAM
STREAM
STREAM
DGRAM
DGRAM
DGRAM
DGRAM
STREAM
STREAM
STREAM
                                                                                                                                                                                                                                                                                                                                                 25616
30795
28736
22622
19520
30803
18861
25674
578
28734
30838
17605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /run/dbus/system bus socket
                                                                                                                                                                                                                                             CONNECTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /run/dbus/system_bus_socket
                                                                                                                                                                  DORAM
STREAM
STREAM
STREAM
STREAM
DGRAM
STREAM
                                                                                                                                                                                                                                                                                                                                                                                                             546/systemd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /run/dbus/system bus socket
                                                                                                                                                                                                                                                                                                                                                 20513
24593
26657
555
29751
26757
19522
25680
25658
25676
19521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tmp/.X11-unix/X0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /run/systemd/journal/stdout
/run/dbus/system_bus_socket
/run/dbus/system_bus_socket
/run/dbus/system_bus_socket
/run/systemd/journal/stdout
                                                                                                                                                                                                                                             CONNECTED
                                                                                                                                                                                                                                                                                                                                                 22694
25615
29743
26747
20566
27763
28869
28676
30867
17349
26724
27769
18860
                                                                                                                                                                                                                                                                                                                                                                                                             546/systemd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /run/systemd/journal/stdout
/run/systemd/journal/stdout
                                                                                                                                                                                                                                                                                                                                                  22586
20512
102
26756
28735
18854
                                                                                                                                                                     STREAM
STREAM
STREAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /run/dbus/system_bus_socket
/tmp/dbus-C0xLFIPSW4
```

b. ¿Que puerto/se ha asignado el sistema operativo al navegador web para establecer la conexión/es TCP?

```
equipolinux@Info-A12-PC01:~$ netstat -tuln
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address
tcp 0 0 127.0.0.1:33060
                                             Foreign Address
                                                                     State
                                            0.0.0.0:*
                                                                      LISTEN
               0 127.0.0.53:53
0 127.0.0.1:3306
0 :::80
0 0.0.0.0:5353
           0
tcp
                                             0.0.0.0:*
                                                                      LISTEN
         0
                                             0.0.0.0:*
tcp
                                                                       LISTEN
tcp6
          0
                                                                       LISTEN
                                             0.0.0.0:*
udp
                 0 127.0.0.53:53
          0
                                             0.0.0.0:*
udp
udp
          0
                 0 127.0.0.1:323
                                             0.0.0.0:*
udp
          0
                 0 0.0.0.0:43679
                                             0.0.0.0:*
          0
udp6
                 0 :::5353
           0
udp6
           0
udp6
                 0 :::50722
```

- 2. Inicia sesión en ServidorLinuxXX con un usuario con privilegios de administrador.
- 2.1. Averigua los puertos TCP a la escucha con el comando netstat -ltn.

```
quipolinux@Info-A12-PC01:~$ netstat -ltn
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address
                                              Foreign Address
         0 0 127.0.0.1:33060
0 0 127.0.0.53:53
tcp
                                              0.0.0.0:*
                                                                        LISTEN
tcp
         0 0 127.0.0.53:53
0 0 127.0.0.1:3306
                                              0.0.0.0:*
                                                                        LISTEN
                                              0.0.0.0:*
tcp
                                                                        LISTEN
          0
                 0 :::80
tcp6
                                                                        LISTEN
```

2.2. Averigua los puertos UDP a la escucha con el comando netstat -lun.

```
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address
                                               Foreign Address
                                                                        State
          0
                0 0.0.0.0:5353
                                              0.0.0.0:*
          0 0 127.0.0.53:53
0 0 127.0.0.1:323
0 0 0.0.0.0:43679
                                              0.0.0.0:*
udp
                                              0.0.0.0:*
udp
udp
                                              0.0.0.0:*
          0
                 0 :::5353
udp6
           0
udp6
                   0 ::1:323
```

- 3 Inicia sesión en ServidorW2022 con un usuario con privilegios de administrador.
- 3.1. Averigua los puertos TCP a la escucha con el comando netstat -a -p TCP -n.

```
| The content of the
```

3.2. Averigua los puertos UDP a la escucha con el comando netstat -a -p UDP -n.

_							
(Not a	11 pro		2-PC01:~\$ netsta could be identif	ied, non-owne	ed process		
will not be shown, you would have to be root to see it all.) Active Internet connections (servers and established)							
		Send-Q	Local Address	Fore	eign Addres	s State	PID/Program name
tcp	0		127.0.0.1:33060		.0.0:*	LISTEN LISTEN	
tcp tcp	9		127.0.0.53:53 127.0.0.1:3306		.0.0:*	LISTEN	
tcp6		0	:::80				
udp udp	8		0.0.0.0:5353		.0.0:*		
udp		0	127.0.0.1:323	0.0	.0.0:*		
udp udp6	0		0.0.0.0:43679	0.0	.0.0:*		
udp6	0		::1:323				
udp6 0 0:::50722 :::" - Active UNIX domain sockets (servers and established)							
	RefCnt		Type	State	I-Node	PID/Program name	Path
unix		[ ACC	STREAM	LISTENING	29737		/run/WSL/2_interop
		[ ACC	STREAM STREAM	LISTENING	17545 99		/run/WSL/1_interop /var/run/dbus/system bus socket
unix		[ ACC	SEQPACKET	LISTENING	23599		/mnt/wslg/weston-notify.sock
		[ ACC	STREAM STREAM	LISTENING	21549 21550		/mnt/wslg/runtine-dir/wayland-0 /tmp/.Xll-unix/X0
unix		[ ACC	STREAM	LISTENING	26706		/mnt/wslg/runtime-dir/pulse/native
		DOA ]		LISTENING LISTENING	21563 19040		/mnt/wslg/PulseAudinRDPSource /mnt/wslg/PulseAudinRDPSink
	2	[ ]	DGRAM				/var/run/chrony/chronyd.sock
unix		[ ACC		LISTENING	26774 18734		/mnt/wslg/PulseServer
unix unix		[ ACC	DGRAM	LISTENING	26123	564/systemd	/tmp/dbus-eXf7gVgkM\ /run/user/1000/systemd/notify
unix		[ ACC		LISTENING	26126	564/systemd	/run/user/1000/systemd/private
unix		[ ACC		LISTENING	29880 26132	564/systemd	/run/systemd/resolve/io.systemd.Resolve /run/user/1000/gnupg/S.dirmngr
unix		[ ACC	STREAM	LISTENING	26134	564/systemd	/run/user/1000/gnupg/S.gpg-agent.browser
unix		[ ]	DGRAM 1 STREAM	CONNECTED	30724 26136	- 564/systemd	/run/systemd/notify /run/user/1000/gnupg/5.gpg-agent.extra
unix		[ ACC	STREAM	LISTENING	30727		/run/systemd/private
unix unix		[ ACC		LISTENING	26138 26140	564/systemd 564/systemd	/run/user/1000/gnupg/S.gpg-agent.ssh /run/user/1000/gnupg/S.gpg-agent
unix		[ ACC	STREAM	LISTENING	30729		/run/systemd/userdb/io.systemd.DynamicUser
unix unix		[ ACC		LISTENING	26142 30730	564/systemd	/run/user/1000/pk-debconf-socket /run/user/1000/pk-debconf-socket
unix		[ ACC		LISTENING	26144	564/systemd	/run/systemo/10.systeme/nanageowom /run/systemo/10.systeme/nanageowom /run/systemo/1009/snapd-session-agent.socket
unix			DGRAM		30733		/run/systemd/journal/syslog
unix unix			DGRAM DGRAM	CONNECTED	30740 30742		/run/systemd/journal/dev-log /run/systemd/journal/socket
unix		[ ACC	STREAM	LISTENING	30744		/run/systemd/journal/stdout
unix unix		DOA ]		LISTENING	30746 31883		/run/udev/control /var/run/msqtd/mysqlx.sock
unix		[ ACC	STREAM	LISTENING	22657		/var/run/mysqld/mysqld.sock
unix unix		DOA ]		LISTENING LISTENING	25713 31913		/run/systemd/journal/io.systemd.journal /run/NSL/486 interop
unix		[ ACC	STREAM	LISTENING	22680		/run/subiquity/socket
unix unix		DOA ]		LISTENING	25785 25787		/run/apport.socket /run/avahi-daemon/socket
unix		[ ACC	STREAM	LISTENING	25789		/run/avani-caemon/socket /run/avani-caemon/socket
unix unix		DOA ]	STREAM	LISTENING	25791 25793		/run/snapd.socket
unix		[ ACC		LISTENING	25793		/run/snapd-snap.socket /run/MS/741_interop
unix		[ ACC	STREAM	LISTENING	25795		/run/uuldd/request
unix unix		11	DGRAM STREAM	CONNECTED	26117 31904	564/systemd	/run/dbus/system bus socket
unix		ij	STREAM	CONNECTED			
unix unix		11	STREAM STREAM	CONNECTED	26709 18801		/run/dbus/system bus socket
unix		î i	STREAM	CONNECTED	31785		/run/systemd/journal/stdout
			STREAM STREAM	CONNECTED	21561 24653		
unix			DGRAM	CONNECTED	22649		
			STREAM STREAM	CONNECTED	19527 26775		
univ	3	11	STREAM	CONNECTED	31763		
							· · · · · · · · · · · · · · · · · · ·