## **LABORATORIO 6 TECH**

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## **INSTALACION SISTEMA**

El primer paso que hemos realizado es actualizar el sistema mediante "sudo apt update && sudo apt upgrade -y"

```
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [21.0 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [52.0 MB]
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [121 kB]
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [32 7 kB]
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [204 kB]
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [9 14 kB]
Get:8 http://kali.download/kali kali-rolling/non-free-firmware amd64 Packages [10.6 kB]
Get:9 http://kali.download/kali kali-rolling/non-free-firmware amd64 Contents (deb) [24.3 kB]
Fetched 74.6 MB in 6s (12.8 MB/s)

1195 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Siguiente a esto instalamos UFW y lo activamos con UFW enable

```
apt install ufw
Installing:
Suggested packages:
  rsyslog
Summary:
  Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 1193
  Download size: 169 kB
  Space needed: 880 kB / 63.8 GB available
Get:1 http://kali.download/kali kali-rolling/main amd64 ufw all 0.36.2-9 [169 kB]
Fetched 169 kB in 1s (269 kB/s)
Preconfiguring packages ...
Selecting previously unselected package ufw.
(Reading database ... 409537 files and directories currently installed.)
Preparing to unpack .../archives/ufw_0.36.2-9_all.deb ...
Unpacking ufw (0.36.2-9) ...
Setting up ufw (0.36.2-9) ...
Creating config file /etc/ufw/before.rules with new version
Creating config file /etc/ufw/before6.rules with new version
Creating config file /etc/ufw/after.rules with new version
Creating config file /etc/ufw/after6.rules with new version
update-rc.d: We have no instructions for the ufw init script.
```

```
ufw enable
Firewall is active and enabled on system startup
```

Ahora veremos las reglas actuales del cortafuego con iptables -L

```
File Actions Edit View Help
iptables -L
Chain INPUT (policy DROP)
          prot opt source
                                          destination
ufw-before-logging-input all -- anywhere
                                                          anywhere
ufw-before-input all -- anywhere
ufw-after-input all -- anywhere
                                                 anywhere
                                                 anywhere
ufw-after-logging-input all -- anywhere
                                                         anywhere
ufw-reject-input all -- anywhere
                                                 anywhere
ufw-track-input all -- anywhere
                                                 anywhere
Chain FORWARD (policy DROP)
           prot opt source
                                          destination
target
ufw-before-logging-forward all -- anywhere
                                                            anywhere
ufw-before-forward all -- anywhere ufw-after-forward all -- anywhere
                                                   anywhere
                                                   anywhere
ufw-after-logging-forward all -- anywhere
                                                           anywhere
ufw-reject-forward all -- anywhere
                                                    anywhere
ufw-track-forward all -- anywhere
                                                   anywhere
```

Ahora configuraremos la política para bloquear todo el tráfico entrante

```
(root® kali)-[~]
# ufw default deny incoming
Default incoming policy changed to 'deny'
(be sure to update your rules accordingly)
```

Ahora permitiremos que todo el trafico de mi dispositivo pueda llegar otros dispositivos

```
ufw default allow outgoing
Default outgoing policy changed to 'allow'
(be sure to update your rules accordingly)
```

Ahora haremos que no pueda entrar el tráfico entrante, aunque se reinicie el dispositivo, es decir que se mantenga persistente

```
(root@kali)-[~]
iptables -P OUTPUT ACCEPT
```

Ahora permitiremos que el tráfico http entré también

```
rootes kall)-[~]

# ufw allow http

Rule added

Rule added (v6)
```

Ahora permitiremos que entre el trafico en los puertos "22" (SSH), "80" (HTTP) y 443 (HTTPS)

```
(root@ kali)-[~]
  iptables -A INPUT -p tcp --dport 22 -j ACCEPT

  (root@ kali)-[~]
  iptables -A INPUT -p tcp --dport 80 -j ACCEPT

  (root@ kali)-[~]
  iptables -A INPUT -p tcp --dport 443 -j ACCEPT
```

Ahora verificamos que ya estén habilitados:

```
ufw status numbered
Status: active
     To
                                Action
                                            From
 1] 22/tcp
                                ALLOW IN
                                            Anywhere
                                ALLOW IN
 2] 80/tcp
                                            Anywhere
 4] 22/tcp (v6)
                                ALLOW IN
                                            Anywhere (v6)
 5] 80/tcp (v6)
                                ALLOW IN
                                            Anywhere (v6)
 6] 443/tcp (v6)
                                ALLOW IN
                                            Anywhere (v6)
```

Ahora para que otras maquinas se conecten al servidor habilitaremos SSH

```
(root@kali)-[~]
# ufw allow ssh
Rule added
Rule added (v6)

(root@kali)-[~]
# ufw allow ssh
Skipping adding existing rule
Skipping adding existing rule (v6)
```

Ahora verificaremos que las reglas se agregaron correctamente

```
iptables -L
Chain INPUT (policy DROP)
target prot opt source
                                       destination
ufw-before-logging-input all -- anywhere
                                                      anywhere
ufw-before-input all -- anywhere anywhere anywhere anywhere
                                              anywhere
                                                     anywhere
ufw-after-logging-input all -- anywhere
ufw-reject-input all -- anywhere anywhere ufw-track-input all -- anywhere anywhere
                               anywhere
anywhere
ACCEPT tcp -- anywhere
                                                            tcp dpt:ssh
          tcp -- anywhere
ACCEPT
                                                           tcp dpt:http
ACCEPT
         tcp -- anywhere
                                       anywhere
                                                            tcp dpt:https
Chain FORWARD (nolicy DROD)
target
          prot opt source
                                       destination
ufw-before-logging-forward all -- anywhere
                                                        anywhere
ufw-before-forward all -- anywhere
                                                anywhere
ufw-after-forward all -- anywhere
                                               anywhere
ufw-after-logging-forward all -- anywhere
                                                      anywhere
ufw-reject-forward all -- anywhere
                                                anywhere
```

Finalmente permitiremos que las maquinas con mi ip "192.168.1.9" puedan acceder a mi servidor desde cualquier puerto}

```
(root@kali)-[~]
# ufw allow from 192.168.1.9
Rule added
```