S7L2

Esercizio di oggi richiede di attaccare kali da metasploitable. Per comodità uso pfsense e metto tutti gli os sulla stessa rete interna

Cambio ip su macchina metasploitable usando nano

```
# This file describes the network interfaces available on your system # and how to activate them. For more information, see interfaces(5).

# The loopback network interface auto lo iface lo inet loopback

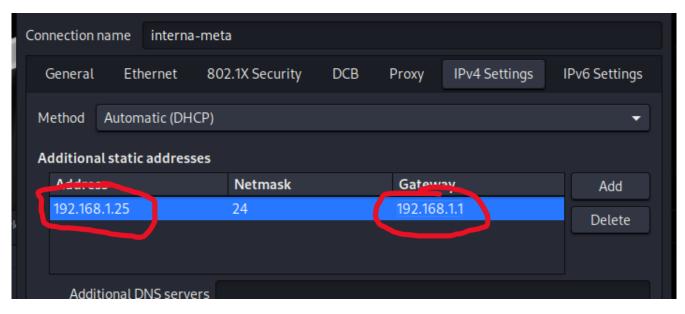
# The primary network interface auto eth0 iface eth0 inet static address 192.168.1.25 netmask 255.255.255.0 gateway 192.168.1.1
```

Cambio ip su pfsense

```
WAN (wan) -> em0 -> v4/DHCP4: 10.0.2.15/24
v6/DHCP6: fd00::a00:27ff:fe24:a03d/
LAN1 (lan) -> em1 -> v4: 192.168 10 1/24
OPT1 (opt1) -> em2 -> v4: 192.168.1.1/24
OPT2 (opt2) -> em3 -> v4: 192.168.30.1/24

0) Logout (SSH only) 9) pfTop
```

Cambio ip su macchina kali



Faccio test di ping:

```
–(kali⊛kali)-[~]
└$ ip a
1: lo: <LOOPBACK, UP, LOWER_UP> mtu 65536 gdisc noqueue state U
NKNOWN group default glen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 :: 1/128 scope host proto kernel_lo
       valid lft forever preferred lft forever
2: eth0: <BROADCAST, MULTICAST, UP, LOWER UP> mtu 1500 qdisc fq
codel state UP group default glen 1000
    link/ether 08:00:27:ad:25:87 brd ff:ff:ff:ff:ff
    inet 192.168.1.25/24 brd 192.168.1.255 scope global nopre
fixroute eth0
       valid_lft forever preferred_lft forever
    inet6 fe80::89ea:99cd:1b3c:ac1c/64 scope link noprefixrou
te
       valid_lft forever preferred_lft forever
3: eth1: <BROADCAST, MULTICAST, UP, LOWER_UP> mtu 1500 qdisc fq_
codel state UP group default glen 1000
    link/ether 08:00:27:f0:90:41 brd ff:ff:ff:ff:ff
  —(kali⊛kali)-[~]
s ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data.
64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 time=2.13 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 time=2.14 ms
^C

    — 192.168.1.1 ping statistics

2 packets transmitted, 2 received, 0% packet loss, time 1046m
rtt min/avg/max/mdev = 2.126/2.134/2.143/0.008 ms
 —(kali⊛kali)-[~]
__$ ping 192.168.1.40
PING 192.168.1.40 (192.168.1.40) 56(84) bytes of data.
64 bytes from 192.168.1.40: icmp_seq=1 ttl=64 time=2.22 ms
64 bytes from 192.168.1.40: icmp_seq=2 ttl=64 time=9.25 ms
 — 192.168.1.40 ping statistics -
2 packets transmitted, 2 received, 0% packet loss, time 1011m
rtt min/avg/max/mdev = 2.224/5.735/9.246/3.511 ms
  -(kali⊛kali)-[~]
```

Le macchine si parlano

Apro msfconsole ed eseguo un nmap

```
<u>msf6</u> > nmap -sV 192.168.1.40
[*] exec: nmap -sV 192.168.1.40
Starting Nmap 7.95 ( https://nmap.org ) at 2025-01-21 16:12 CET
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try
using --system-dns or specify valid servers with --dns-servers
Nmap scan report for 192.168.1.40
Host is up (0.0022s latency).
Not shown: 977 closed tcp ports (reset)
PORT
        STATE SERVICE
                            VERSION
21/tcp
        open ftp
                            vsftpd 2.3.4
22/tcp
        open ssh
                            OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
        open telnet?
23/tcp
25/tcp
        open smtp?
53/tcp
        open domain
                            ISC BIND 9.4.2
                            Apache httpd 2.2.8 ((Ubuntu) DAV/2)
80/tcp
        open http
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
                            2-4 (RPC #100003)
2049/tcp open nfs
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)
                            (access denied)
6000/tcp open X11
                            UnrealIRCd
6667/tcp open irc
8009/tcp open ajp13
                            Apache Jserv (Protocol v1.3)
8180/tcp open unknown
MAC Address: 08:00:27:AE:7A:06 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
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/
Nmap done: 1 IP address (1 host up) scanned in 181.35 seconds
msf6 >
```

Cerco exploit telnet con search telnet auxiliary

<pre>msf6 > search telnet auxiliary</pre>				
Matching Modules				
# Name	Disclosure Date	Rank	Check	Description
sī shared				
<pre>0 auxiliary/server/capture/telnet</pre>		normal	No	Authentication Capture:
Telnet				
<pre>1 auxiliary/scanner/telnet/brocade_enable_login</pre>		normal	No	Brocade Enable Login Che
ck Scanner				
2 auxiliary/dos/cisco/ios_telnet_rocem	2017-03-17	normal	No	Cisco IOS Telnet Denial
of Service	2012 02 0/	normal	NI-	D-Link DIR-600 / DIR-300
3 auxiliary/admin/http/dlink_dir_300_600_exec_noauth Unauthenticated Remote Command Execution	2013-02-04	normat	NO	D-LINK DIR-600 / DIR-300
4 auxiliary/scanner/ssh/juniper_backdoor	2015-12-20	normal	No	Juniper SSH Backdoor Sca
nner	2013 12 20	1101 illa t	NO	Juliper John Backdoor Jea
5 auxiliary/scanner/telnet/lantronix_telnet_password		normal	No	Lantronix Telnet Passwor
d Recovery				
<pre>6 auxiliary/scanner/telnet/lantronix_telnet_version</pre>		normal	No	Lantronix Telnet Service
Banner Detection				
<pre>7 auxiliary/dos/windows/ftp/iis75_ftpd_iac_bof</pre>	2010-12-21	normal	No	Microsoft IIS FTP Server
Encoded Response Overflow Trigger				
8 auxiliary/admin/http/netgear_pnpx_getsharefolderlist_auth_bypass	2021-09-06	normal	Yes	Netgear PNPX_GetShareFol
derList Authentication Bypass	11077			
9 auxiliary/admin/http/netgear_r6700_pass_reset ticated LAN Admin Password Reset	2020-06-15	normal	Yes	Netgear R6700v3 Unauthen
10 auxiliary/admin/http/netgear_r7000_backup_cgi_heap_overflow_rce	2021-04-21	normal	Vac	Netgear R7000 backup.cgi
Heap Overflow RCE	2021-04-21	normat	res	weigear k/000 backup.cgi
11 auxiliary/scanner/telnet/telnet_ruggedcom		normal	No	RuggedCom Telnet Passwor
d Generator		110111101		naggeasom retnet rassust
12 auxiliary/scanner/telnet/satel_cmd_exec	2017-04-07	normal	No	Satel Iberia SenNet Data
Logger and Electricity Meters Command Injection Vulnerability				
13 auxiliary/scanner/telnet/telnet_login		normal	No	Telnet Login Check Scann
er				
<pre>14 auxiliary/scanner/telnet/telnet_version</pre>		normal	No	Telnet Service Banner De
tection				
15 auxiliary/scanner/telnet/telnet_encrypt_overflow		normal	No	Telnet Service Encryptio
n Key ID Overflow Detection				

```
msf6 > use 14
msf6 auxiliary(scanner/telnet/telnet_version) > set options
[-] Unknown datastore option: options.
Usage: set [options] [name] [value]

Set the given option to value. If value is omitted, print the current value.
If both are omitted, print options that are currently set.

If run from a module context, this will set the value in the module's datastore. Use -g to operate on the global datastore.

If setting a PAYLOAD, this command can take an index from `show payloads'.

OPTIONS:
```

-g, --global Operate on global datastore variables

-c, --clear

-h, --help Help banner.

Clear the values, explicitly setting to nil (default)

```
msf6 auxiliary(scanner/telnet/telnet_version) > options
Module options (auxiliary/scanner/telnet/telnet_version):
             Current Setting Required Description
  PASSWORD
                                        The password for the specified username
  RHOSTS
                                        The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-
                                        metasploit.html
                                        The target port (TCP)
  RPORT
             23
                              yes
  THREADS
                                        The number of concurrent threads (max one per host)
                              yes
  TIMEOUT
            30
                              yes
                                        Timeout for the Telnet probe
  USERNAME
                                        The username to authenticate as
View the full module info with the info, or info -d command.
```

```
View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/telnet/telnet_version) > set RPORT 23
[!] Unknown datastore option: RHPORT. Did you mean RPORT?
RHPORT ⇒ 23

msf6 auxiliary(scanner/telnet/telnet_version) > set RHOST 192.168.1.40
[!] Unknown datastore option: R◆HOST. Did you mean RHOST?
R◆HOST ⇒ 192.168.1.40

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

Metasploit ha recuperato il banner del servizio Telnet in esecuzione sulla macchina bersaglio **Metasploitable** all'indirizzo IP **192.168.1.40** sulla porta **23**.

Il banner ottenuto è il messaggio di benvenuto standard di Metasploitable, che indica:

- La macchina è una macchina Metasploitable configurata con il nome utente e la password predefiniti (msfadmin/msfadmin).
- Contiene un avviso di sicurezza che suggerisce di non esporre questa macchina a reti non fidate.
- Conferma che il servizio Telnet è attivo e accessibile.

```
msf6 auxiliary(scanner/telnet/telnet_version) > set USERNAME msfadmin
USERNAME ⇒ msfadmin
msf6 auxiliary(scanner/telnet/telnet_version) > set PASSWORD msfadmin
PASSWORD ⇒ msfadmin
msf6 auxiliary(scanner/telnet/telnet_version) > set THREADS 4
THREADS ⇒ 4
msf6 auxiliary(scanner/telnet/telnet_version) > options
Module options (auxiliary/scanner/telnet/telnet_version):
   Name
             Current Setting Required Description
   PASSWORD
            msfadmin
                                        The password for the specified username
                              no
   RHOSTS
             192.168.1.40
                              yes
                                        The target host(s), see https://docs.metasploit.com/do
                              yes
                                        The target port (TCP)
   RPORT
             23
                              yes
  THREADS
             4
                                        The number of concurrent threads (max one per host)
   TIMEOUT
                              yes
             30
                                        Timeout for the Telnet probe
  USERNAME msfadmin
                                        The username to authenticate as
                              no
View the full module info with the info, or info -d command.
```