

21 FEBBRAIO 2024

REPORT - EPICODE

S5L3

PRESENTED BY

Alessandro Marasca



Tecniche di scansione con Nmap

Si richiede allo studente di effettuare le seguenti scansioni sul target Metasploitable:

- OS fingerprint.
- Syn Scan.
- TCP connect - trovate differenze tra i risultati della scansioni TCP connect SYN?
- Version detection.

E la seguente sul target Windows 7:

- OS fingerprint.

OS FINGERPRINT

```
File Actions Edit View Help
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
No exact OS matches for host (If you know what OS is running on it, see https://nmap.org/submit/ ).
TCP/IP fingerprint:
OS:SCAN(V=7.94SVNWE=43D-2/21XOT-21XCT-1XCU-39786XPV-YXDS-2XDC-IXG-YXTM-65D6
OS:5740XP-x86_64-pc-linux-gnu)SEQ(SP=CB%GCD-1%ISR=CC%TI-Z%II-IXTS-5)SEQ(SP=
OS:CB%GCD-1%ISR=CC%TI-Z%II-IXTS-6)SEQ(SP=CB%GCD-2%ISR=CC%TI-Z%II-IXTS-6)OPS
OS:(O1-M5B4ST11NW5X02-M5B4ST11NW5X03-M5B4NNT11NW5X04-M5B4ST11NW5X05-M5B4ST1
OS:1NW5X06-M5B4ST11)WIN(W1=16A0XW2-16A0XW3-16A0XW4-16A0XW5-16A0XW6-16A0)ECN
OS:(R-YXDF-YXT-40XW-16D0X0-M5B4NNSNW5XCC-NXQ-)T1(R-YXDF-YXT-40XS-0XA-S+XF-A
OS:5XRD-0XQ-)T2(R-N)T3(R-N)T4(R-N)T5(R-YXDF-YXT-40XW-0XS-ZXA-S+XF-ARX0-%RD-
OS:0XQ-)T6(R-N)T7(R-N)U1(R-YXDF-NXT-40XIPL-164XUN-0%RIPL-GXRID-GXRIPLCK-GXRU
OS:CK-GXRU-DG)IE(R-YXDFI-NXT-40XCD-S)
Network Distance: 2 hops
OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 12.86 seconds
(root@kali)-[/home/kali]
```

SYN SCAN

```
(root@kali)-[/home/kali]
# nmap -sS 192.168.49.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:08 EST
Nmap scan report for 192.168.49.101
Host is up (0.28s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
Nmap done: 1 IP address (1 host up) scanned in 2.06 seconds
```

TCP

Nmap - ST completa il 3-way-handshake, creando così il canale.

Recupera info sullo stato della porta, è dunque una tecnica di scanning più identificabile e che su grosse reti potrebbe creare congestioni di rete.

```
(root@kali)-[/home/kali]
# nmap -sT 192.168.49.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:07 EST
Nmap scan report for 192.168.49.101
Host is up (0.032s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown

Nmap done: 1 IP address (1 host up) scanned in 1.95 seconds
```

WINDOWS - OS DETECTION

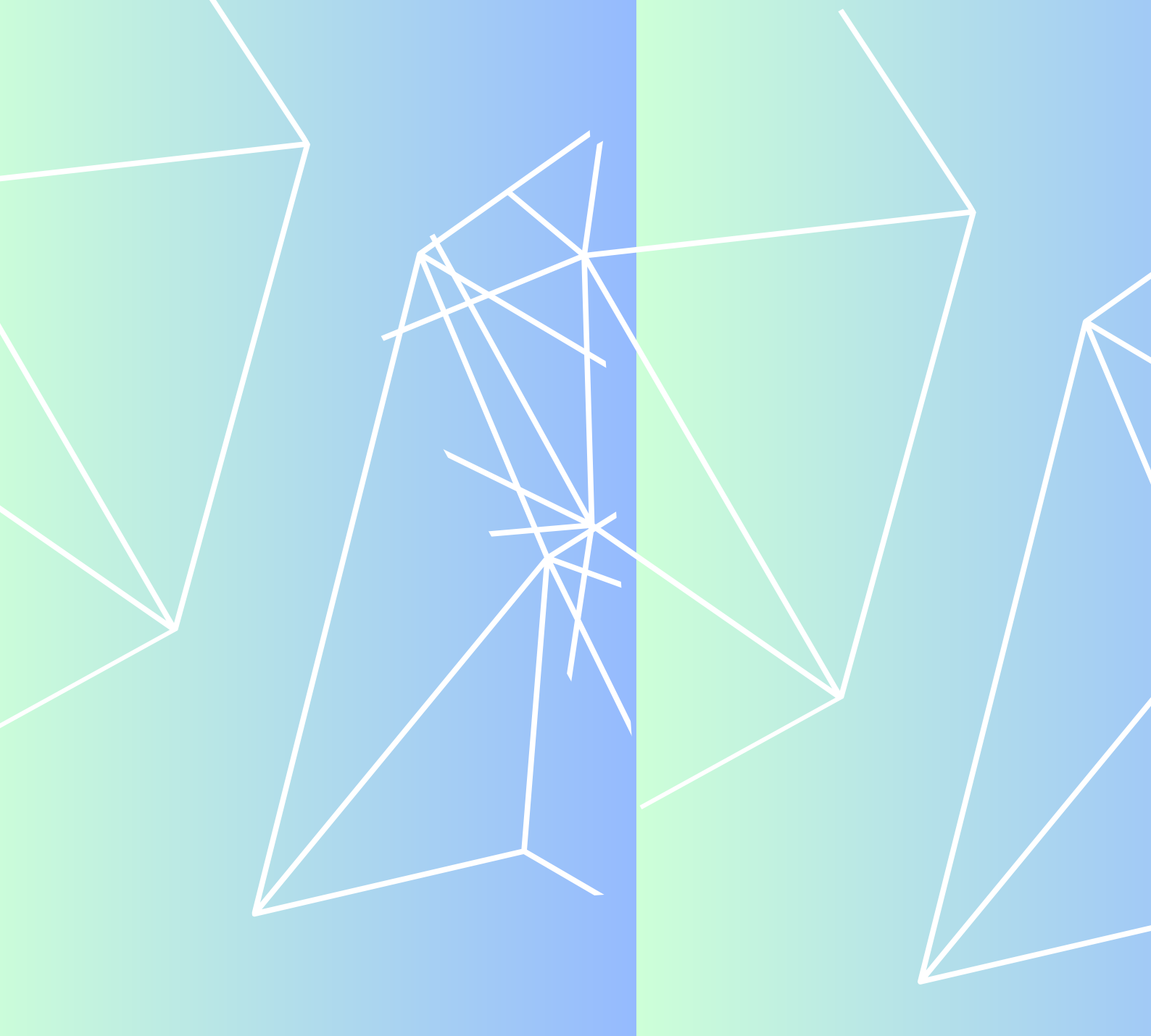
Procediamo con l'identificazione OS di Windows, agisce allo stesso modo di Meta, andando a rintracciare lo stato delle porte dall'IP di Windows e notiamo una differenza: la presenza dei **demoni**: un programma eseguito in background, cioè senza che sia sotto il controllo diretto dell'utente, tipicamente fornendo un servizio all'utente. Principalmente viene utilizzato sui server ma anche su normali PC.

```
(root@kali)-[/home/kali]
# nmap -O 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:53 EST
Nmap scan report for 192.168.50.102
Host is up (0.0015s latency).
Not shown: 991 closed tcp ports (reset)
PORT      STATE SERVICE
135/tcp    open  msrpc
139/tcp    open  netbios-ssn
445/tcp    open  microsoft-ds
5357/tcp   open  wsddapi
49152/tcp  open  unknown
49153/tcp  open  unknown
49154/tcp  open  unknown
49155/tcp  open  unknown
49156/tcp  open  unknown
MAC Address: 08:00:27:0A:A3:AD (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Microsoft Windows 7|2008|8.1
OS CPE: cpe:/o:microsoft:windows_7:- sp1 cpe:/o:microsoft:windows_server_2008::sp1 cpe:/o:microsoft:windows_server_2008:r2 cpe:/o:microsoft:windows_8 cpe:/o:microsoft:windows_8.1
OS details: Microsoft Windows 7 SP0 - SP1, Windows Server 2008 SP1, Windows Server 2008 R2, Windows 8, or Windows 8.1 Update 1
Network Distance: 1 hop

OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 1.84 seconds
```

```
(root@kali)-[/home/kali]
# nmap -sV 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:55 EST
Nmap scan report for 192.168.50.102
Host is up (0.00075s latency).
Not shown: 991 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
135/tcp    open  msrpc        Microsoft Windows RPC
139/tcp    open  netbios-ssn  Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds  Microsoft Windows 7 - 10 microsoft-ds (workgroup: WORKGROUP)
5357/tcp   open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
49152/tcp  open  msrpc        Microsoft Windows RPC
49153/tcp  open  msrpc        Microsoft Windows RPC
49154/tcp  open  msrpc        Microsoft Windows RPC
49155/tcp  open  msrpc        Microsoft Windows RPC
49156/tcp  open  msrpc        Microsoft Windows RPC
MAC Address: 08:00:27:0A:A3:AD (Oracle VirtualBox virtual NIC)
Service Info: Host: ALE-PC; OS: Windows; CPE: cpe:/o:microsoft:windows

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 60.81 seconds
```



Alessandro Marasca

Epicode

S5L3 - CS0124