



ING. REDES
INTELIGENTES Y
CIBERSEGURIDAD

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Grupo: IRIYC91

Ejercicio 1: Mapeo completo de tu red local

Con base en tu segmento de red, realiza un escaneo que te permita identificar todos los hosts activos y los servicios que están corriendo en cada uno. Analiza qué equipos representan un posible riesgo por los servicios expuestos.

En Wireshark deberían ver:

- Tráfico SYN enviado a múltiples IPs del segmento.
- Respuestas SYN-ACK desde los hosts activos.

No.	Time	Source	Destination	Protocol	Length	Info
77103	172310.44169...	10.10.56.131	192.168.157.128	TCP	60	5221 → 47688 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77104	172311.38984...	192.168.157.128	10.10.56.131	TCP	58	47676 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77105	172311.40904...	10.10.56.131	192.168.157.128	TCP	60	5221 → 47690 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77106	172312.39054...	192.168.157.128	10.10.56.131	TCP	58	47678 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77107	172312.40866...	10.10.56.131	192.168.157.128	TCP	60	636 → 47674 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77108	172313.39171...	192.168.157.128	10.10.56.131	TCP	58	47680 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77109	172313.41907...	10.10.56.131	192.168.157.128	TCP	60	636 → 47676 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77110	172314.39277...	192.168.157.128	10.10.56.131	TCP	58	47682 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77111	172314.43236...	10.10.56.131	192.168.157.128	TCP	60	636 → 47678 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77112	172315.39380...	192.168.157.128	10.10.56.131	TCP	58	47684 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77113	172315.41230...	10.10.56.131	192.168.157.128	TCP	60	636 → 47680 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77114	172316.39444...	192.168.157.128	10.10.56.131	TCP	58	47686 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77115	172316.42051...	10.10.56.131	192.168.157.128	TCP	60	636 → 47682 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77116	172317.39554...	192.168.157.128	10.10.56.131	TCP	58	47688 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77117	172317.40334...	10.10.56.131	192.168.157.128	TCP	60	636 → 47684 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77118	172318.39665...	192.168.157.128	10.10.56.131	TCP	58	47690 → 636 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77119	172318.42529...	10.10.56.131	192.168.157.128	TCP	60	636 → 47686 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77120	172319.39927...	192.168.157.128	10.10.56.131	TCP	58	47674 → 5815 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77121	172319.40771...	10.10.56.131	192.168.157.128	TCP	60	636 → 47688 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77122	172320.40031...	192.168.157.128	10.10.56.131	TCP	58	47676 → 5815 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77123	172320.41701...	10.10.56.131	192.168.157.128	TCP	60	636 → 47690 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77124	172321.40145...	10.10.56.131	192.168.157.128	TCP	60	5815 → 47674 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
77125	172321.40382...	192.168.157.128	10.10.56.131	TCP	58	47678 → 5815 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77126	172322.40522...	192.168.157.128	10.10.56.131	TCP	58	47680 → 5815 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
77127	172322.42991...	10.10.56.131	192.168.157.128	TCP	60	5815 → 47676 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0

No.	Time	Source	Destination	Protocol	Length	Info
78087	172572.28960...	192.168.157.128	10.10.56.131	TCP	58	48518 → 8443 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78088	172572.28964...	192.168.157.128	10.10.56.131	TCP	58	48518 → 61990 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78089	172572.29292...	192.168.157.128	10.10.56.131	TCP	58	48518 → 3404 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78090	172572.29302...	192.168.157.128	10.10.56.131	TCP	58	48518 → 3322 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78091	172572.29305...	192.168.157.128	10.10.56.131	TCP	58	48518 → 24444 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78092	172572.29308...	192.168.157.128	10.10.56.131	TCP	58	48518 → 8500 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78093	172572.29311...	192.168.157.128	10.10.56.131	TCP	58	48518 → 19350 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78094	172572.29314...	192.168.157.128	10.10.56.131	TCP	58	48518 → 16993 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78095	172572.29317...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1900 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78096	172572.29320...	192.168.157.128	10.10.56.131	TCP	58	48518 → 3221 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78097	172572.29323...	192.168.157.128	10.10.56.131	TCP	58	48518 → 666 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78098	172572.29326...	192.168.157.128	10.10.56.131	TCP	58	48518 → 5280 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78099	172572.29329...	192.168.157.128	10.10.56.131	TCP	58	48518 → 8010 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78100	172572.29332...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1192 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78101	172572.29335...	192.168.157.128	10.10.56.131	TCP	58	48518 → 6059 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78102	172572.29338...	192.168.157.128	10.10.56.131	TCP	58	48518 → 8800 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78103	172572.29341...	192.168.157.128	10.10.56.131	TCP	58	48518 → 4848 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78104	172572.29344...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1071 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78105	172572.29347...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1145 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78106	172572.29349...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1048 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78107	172572.29352...	192.168.157.128	10.10.56.131	TCP	58	48518 → 1032 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78108	172572.29615...	192.168.157.128	10.10.56.131	TCP	58	48518 → 20005 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78109	172572.39829...	192.168.157.128	10.10.56.131	TCP	58	48518 → 5214 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78110	172572.49850...	192.168.157.128	10.10.56.131	TCP	58	48516 → 2725 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
78111	172572.59874...	192.168.157.128	10.10.56.131	TCP	58	48518 → 2725 [SYN] Seq=0 Win=1024 Len=0 MSS=1460

▶ Frame 77068: 58 bytes on wire (464 bits), 58 bytes captured (464 bits) on

▶ Ethernet II, Src: VMware_9a:3f:ca (08:0c:29:9a:3f:ca), Dst: VMware_F8:76

▶ Internet Protocol Version 4, Src: 192.168.157.128, Dst: 10.10.56.131

▶ Transmission Control Protocol, Src Port: 47680, Dst Port: 5280, Seq: 0,

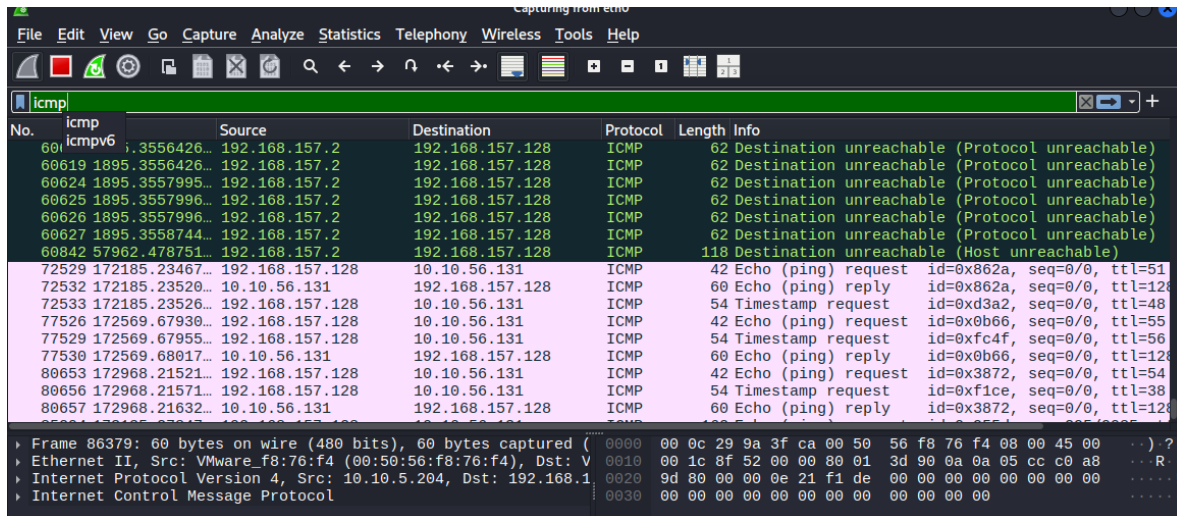
0900 00 50 56 f8 76 f4 00 0c 29 9a 3f ca 08 00 45 00 PV v...) ?... E

0910 00 2c a5 3d 00 00 29 06 4b d9 c0 a8 9d 00 0a 0a , =) K... ..

0920 38 83 ba 40 14 a0 d4 a2 9b be 00 00 00 00 60 02 8 . @... ..

0930 04 00 b4 2e 00 00 02 04 05 b4

Tráfico ICMP si usan ping scan.



No.	icmp	Source	Destination	Protocol	Length	Info
60619	icmpv6	192.168.157.2	192.168.157.128	ICMP	62	Destination unreachable (Protocol unreachable)
60624	icmpv6	192.168.157.2	192.168.157.128	ICMP	62	Destination unreachable (Protocol unreachable)
60625	icmpv6	192.168.157.2	192.168.157.128	ICMP	62	Destination unreachable (Protocol unreachable)
60626	icmpv6	192.168.157.2	192.168.157.128	ICMP	62	Destination unreachable (Protocol unreachable)
60627	icmpv6	192.168.157.2	192.168.157.128	ICMP	62	Destination unreachable (Protocol unreachable)
60842	icmpv6	192.168.157.2	192.168.157.128	ICMP	118	Destination unreachable (Host unreachable)
72529	icmpv6	192.168.157.128	10.10.56.131	ICMP	42	Echo (ping) request id=0x862a, seq=0/0, ttl=51
72532	icmpv6	10.10.56.131	192.168.157.128	ICMP	60	Echo (ping) reply id=0x862a, seq=0/0, ttl=128
72533	icmpv6	192.168.157.128	10.10.56.131	ICMP	54	Timestamp request id=0xd3a2, seq=0/0, ttl=48
77526	icmpv6	192.168.157.128	10.10.56.131	ICMP	42	Echo (ping) request id=0x0b66, seq=0/0, ttl=55
77529	icmpv6	192.168.157.128	10.10.56.131	ICMP	54	Timestamp request id=0xfc4f, seq=0/0, ttl=56
77530	icmpv6	10.10.56.131	192.168.157.128	ICMP	60	Echo (ping) reply id=0x0b66, seq=0/0, ttl=128
80653	icmpv6	192.168.157.128	10.10.56.131	ICMP	42	Echo (ping) request id=0x3872, seq=0/0, ttl=54
80656	icmpv6	192.168.157.128	10.10.56.131	ICMP	54	Timestamp request id=0xf1ce, seq=0/0, ttl=38
80657	icmpv6	10.10.56.131	192.168.157.128	ICMP	60	Echo (ping) reply id=0x3872, seq=0/0, ttl=128

Frame 86379: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface 0
Ethernet II, Src: VMware_f8:76:f4 (00:50:56:f8:76:f4), Dst: 00:0c:29:9a:3f:ca (08:00:27:9a:3f:ca)
Internet Protocol Version 4, Src: 10.10.5.204, Dst: 192.168.1.1
Internet Control Message Protocol

Escaneos dirigidos a múltiples puertos por host.

```
kali@kali: ~  
File Actions Edit View Help  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 21:45 EDT  
Warning: 10.10.56.131 giving up on port because retransmission cap hit (10).  
No. Time Source Destination Protocol  
10.10.56.131 192.168.157.128 10.10.56.204 TCP  
(kali@kali)-[~]  
$ nmap -sS -sV -O 10.10.56.131  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 21:52 EDT  
Stats: 0:02:41 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan  
Service scan Timing: About 87.50% done; ETC: 21:55 (0:00:22 remaining)  
Nmap scan report for 10.10.56.131  
Host is up (0.0036s latency).  
Not shown: 992 filtered tcp ports (no-response)  
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?       
902/tcp   open  ssl/vmware-auth  VMware Authentication Daemon 1.10 (Uses VNC, S  
OAP)  
2968/tcp  open  enpp?               
5357/tcp  open  http              Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)  
5432/tcp  open  postgresql        PostgreSQL DB (Spanish)  
7070/tcp  open  ssl/realserver?     
Warning: OSScan results may be unreliable because we could not find at least  
1 open and 1 closed port  
Device type: general purpose  
Running: Microsoft Windows XP|7|2012  
OS CPE: cpe:/o:microsoft:windows_xp::sp3 cpe:/o:microsoft:windows_7 cpe:/o:mi  
crosoft:windows_server_2012
```

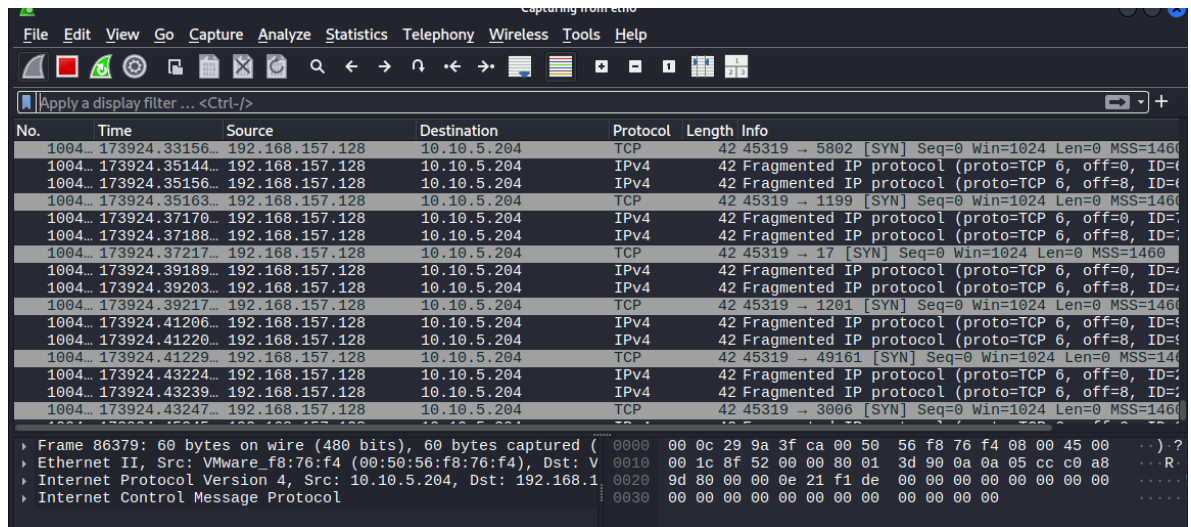
Los comandos utilizados para la realización de este ejercicio fueron: nmap -sS , nmap -sV y Nmap -O

Ejercicio 2: Escaneo sigiloso a un host en tu red

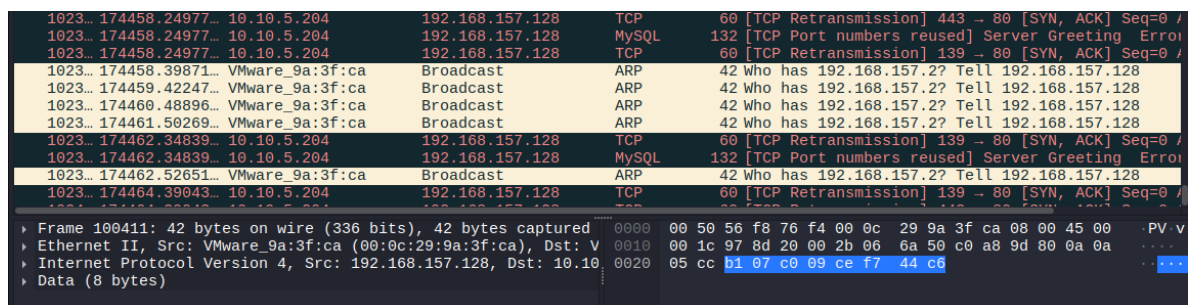
Escoge un host dentro de tu red y realiza un escaneo que utilice técnicas de evasión para evitar su detección por firewalls o sistemas de monitoreo. Evalúa si lograste obtener información sin generar tráfico evidente.

En Wireshark deberían ver:

Tráfico con fragmentación de paquetes TCP/IP.



Uso de un puerto fuente no estándar (ej. 53, 123)



Coloque el puerto 80 ya que no me detecto otros equipo y detecto el mysql de mi equipo

```
(kali㉿kali)-[~]
$ nmap -sS --source-port 80 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 22:16 EDT
Nmap scan report for 10.10.5.204
Host is up (0.0014s latency).
All 1000 scanned ports on 10.10.5.204 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
Nmap done: 1 IP address (1 host up) scanned in 21.35 seconds
```

Comando: nmap -sS --source port 80

- Intervalos largos entre los paquetes (bajo volumen).

The image shows a Wireshark packet capture window. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. Below the menu is a toolbar with various icons. A display filter bar shows 'Apply a display filter ... <Ctrl-/>'. The main packet list table has columns for No., Time, Source, Destination, Protocol, Length, and Info. The table contains 16 rows of ARP requests. The bottom pane shows the details of the selected packet (No. 102624), indicating it is an Ethernet II frame, Src: VMware_9a:3f:ca (00:0c:29:9a:3f:ca), Dst: B, and an Address Resolution Protocol (request).

No.	Time	Source	Destination	Protocol	Length	Info
1025...	175000.28822...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1025...	175000.28823...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1025...	175002.33355...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1025...	175002.33357...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1025...	175004.36949...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1025...	175004.36950...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1025...	175006.41451...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1025...	175006.41454...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1025...	175006.41451...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1026...	175006.41465...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1026...	175010.42967...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1026...	175010.42969...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1026...	175012.44973...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1026...	175012.44975...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca
1026...	175014.50527...	VMware_f8:76:f4	Broadcast	ARP	60	Who has 192.168.157.128? Tell 192.168.157.2
1026...	175014.50530...	VMware_9a:3f:ca	VMware_f8:76:f4	ARP	42	192.168.157.128 is at 00:0c:29:9a:3f:ca

Frame 102624: 42 bytes on wire (336 bits), 42 bytes captured
Ethernet II, Src: VMware_9a:3f:ca (00:0c:29:9a:3f:ca), Dst: B
Address Resolution Protocol (request)


```
File Actions Edit View Help
(kali@kali)-[~]
$ nmap -sS --source-port 80 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 22:16 EDT
Nmap scan report for 10.10.5.204
Host is up (0.0014s latency).
All 1000 scanned ports on 10.10.5.204 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 21.35 seconds

(kali@kali)-[~]
$ nmap -sS --scan-delay 5s 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 22:27 EDT
Note: Host seems down. If it is really up, but blocking our ping probes, try
-Pn
Nmap done: 1 IP address (0 hosts up) scanned in 46.16 seconds

(kali@kali)-[~]
$ nmap -sS -f --source-port 80 --scan-delay 5s 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-02 22:29 EDT
Note: Host seems down. If it is really up, but blocking our ping probes, try
-Pn
Nmap done: 1 IP address (0 hosts up) scanned in 46.17 seconds

(kali@kali)-[~]
$
```

Ejercicio 3: Enumeración avanzada de servicios

Identifica un host dentro de tu red que tenga servicios web, FTP, o SSH, y utiliza técnicas avanzadas para obtener información detallada de esos servicios (como banners, versiones, métodos HTTP, etc.).

En Wireshark deberían ver:

Filtros: `tcp.port == 21 || tcp.port == 22 || tcp.port == 80 || tcp.port == 443`

- Solicitudes hacia puertos 21, 22, 80, 443, u otros comunes.

Volume 40%

ES137/ES1373 / Creative Labs CT2518 (Audio PCI 64/128/5200 / Creative CT4810/CT5803/CT5806 [Sound Blaster PCI]) Analog Stereo

Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length	Info
1205	243050.43530	10.10.5.204	192.168.157.128	TCP	60	1111 → 33504 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243051.41203	192.168.157.128	10.10.5.204	TCP	58	33508 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243051.43601	10.10.5.204	192.168.157.128	TCP	60	1111 → 33508 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243052.41389	192.168.157.128	10.10.5.204	TCP	58	33510 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243052.45344	10.10.5.204	192.168.157.128	TCP	60	5440 → 33519 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243053.41485	192.168.157.128	10.10.5.204	TCP	58	33512 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243053.45039	10.10.5.204	192.168.157.128	TCP	60	1111 → 33508 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243054.41624	192.168.157.128	10.10.5.204	TCP	58	33514 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243054.44612	10.10.5.204	192.168.157.128	TCP	60	1111 → 33510 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243055.41759	192.168.157.128	10.10.5.204	TCP	58	33516 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243055.44409	10.10.5.204	192.168.157.128	TCP	60	1111 → 33512 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243056.13123	fe80::9beb:1582:491::ff02::2	ff02::2	ICMPv6	62	Router Solicitation
1205	243056.41878	192.168.157.128	10.10.5.204	TCP	58	33518 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243056.47201	10.10.5.204	192.168.157.128	TCP	60	1111 → 33514 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243056.80435	192.168.157.1	255.255.255.255	UDP	60	54698 → 3289 Len=14
1205	243057.41930	192.168.157.128	10.10.5.204	TCP	58	33520 → 1111 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1205	243057.45687	10.10.5.204	192.168.157.128	TCP	60	1111 → 33516 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243058.45720	10.10.5.204	192.168.157.128	TCP	60	1111 → 33518 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243059.45582	10.10.5.204	192.168.157.128	TCP	60	1111 → 33520 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1205	243066.80614	192.168.157.1	255.255.255.255	UDP	60	54698 → 3289 Len=14
1205	243077.02518	192.168.157.1	255.255.255.255	UDP	60	54283 → 3289 Len=14
1205	243081.73122	192.168.157.1	224.0.0.251	MDNS	210	Standard query response 0x0000 PTR ENRIQUE._dosvc._tcp.local SRV 0 0...
1205	243081.73122	fe80::9fc6:ff2e:606::ff02::fb	ff02::fb	MDNS	230	Standard query response 0x0000 PTR ENRIQUE._dosvc._tcp.local SRV 0 0...

Frame 115612: 58 bytes on wire (464 bits), 58 bytes captured (464 bits) on Ethernet II, Src: VMware_9a:3f:ca (00:0c:29:9a:3f:ca), Dst: VMware_f8:76: Internet Protocol Version 4, Src: 192.168.157.128, Dst: 10.10.5.204, Transmission Control Protocol, Src Port: 33500, Dst Port: 65000, Seq: 0,

Comandos utilizados sudo nmap -sV --script=banner -p 21,22,80,443

- Tráfico con comandos FTP, HTTP o SSH.

Capturing from eth0

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httpS

No.	Time	Source	Destination	Protocol	Length	Info
84738	172984.45709	192.168.157.128	10.10.56.131	HTTP	72	GET / HTTP/1.0
84948	172989.46178	10.10.56.131	192.168.157.128	HTTP	544	HTTP/1.1 400 Bad Request (text/html)
84951	172989.46210	192.168.157.128	10.10.56.131	HTTP	72	GET / HTTP/1.0
84955	172989.46280	192.168.157.128	10.10.56.131	HTTP	72	GET / HTTP/1.0
84957	172989.46317	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
84967	172989.46810	192.168.157.128	10.10.56.131	HTTP	76	OPTIONS / HTTP/1.0
85024	172994.46936	192.168.157.128	10.10.56.131	HTTP	76	OPTIONS / HTTP/1.0
85138	173057.04865	192.168.157.128	10.10.56.131	HTTP	167	GET /nice%20ports%2C/Tri%6Eity.txt%2ebak HTTP/1.0
85333	173136.00180	192.168.157.128	10.10.56.131	HTTP	233	GET /nmaplowercheck1751507711 HTTP/1.1
85335	173136.00231	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85336	173136.00473	192.168.157.128	10.10.56.131	HTTP	72	GET / HTTP/1.0
85337	173136.00490	192.168.157.128	10.10.56.131	HTTP	675	POST /sdk HTTP/1.1
85340	173136.00540	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85341	173136.00540	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85352	173136.01145	192.168.157.128	10.10.56.131	HTTP	219	GET /evox/about HTTP/1.1
85355	173136.01200	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85357	173136.01312	192.168.157.128	10.10.56.131	HTTP	214	GET /HNAP1 HTTP/1.1
85359	173136.01376	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85376	173136.02531	192.168.157.128	10.10.56.131	HTTP	72	GET / HTTP/1.0
85378	173136.02574	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)
85383	173136.13105	192.168.157.128	10.10.56.131	HTTP	92	GET / HTTP/1.1
85395	173136.13283	10.10.56.131	192.168.157.128	HTTP	567	HTTP/1.1 503 Service Unavailable (text/html)

Frame 84738: 72 bytes on wire (576 bits), 72 bytes captured (576 bits) on Ethernet II, Src: VMware_9a:3f:ca (00:0c:29:9a:3f:ca), Dst: VMware_f8:76: Internet Protocol Version 4, Src: 192.168.157.128, Dst: 10.10.56.131, Hypertext Transfer Protocol, Method: GET, Request-URI: /, Version: 1.0

- Respuestas con datos identificables: versiones de servicios, encabezados HTTP, mensajes de bienvenida de FTP/SSH.

```

Nmap done: 1 IP address (1 host up) scanned in 0.54 seconds
1206 243166 18118 192.168.157.128 192.30.143.130 NTP
(kali@kali)-[~] 313.. VMware_9a:3f:ca VMware_f8:76:f4 ARP
$ nmap -p 80 --script http-enum,http-headers,http-title 10.10.5.204 ARP
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-03 17:22 EDT NTP
Nmap scan report for 10.10.5.204 192.168.157.2 DNS
Host is up (0.0012s latency). 192.168.157.2 DNS
1206 243206 52217 192.168.157.2 192.168.157.128 DNS
PORT STATE SERVICE 192.168.157.2 192.168.157.128 DNS
80/tcp filtered http 136.. 192.168.157.128 132.248.30.3 NTP
1206 243216 71188 192.168.157.128 45.231.168.6 NTP
Nmap done: 1 IP address (1 host up) scanned in 0.51 seconds 57.2 DNS
(kali@kali)-[~] 192.168.157.2 192.168.157.2 DNS
$ 1052.. 192.168.157.2 192.168.157.128 DNS
1206 243227 15455 192.168.157.2 192.168.157.128 DNS

```

nmap -p 80 --script http-enum,http-headers,http-title

Ejercicio 4: Detección de hosts sin ICMP habilitado

Encuentra dentro de tu red aquellos hosts que no responden a ping (ICMP), pero que tienen puertos abiertos accesibles. Analiza si puedes detectarlos sin depender de ICMP.

En Wireshark deberían ver:

- Escaneos TCP sin tráfico ICMP.

```

1206 243433 133003 192.168.157.128 192.168.157.204 TCP
(kali@kali)-[~] 1005 10.10.5.204 192.168.157.128 TCP
$ nmap -Pn -p 80,443 10.10.5.204 192.168.157.128 TCP
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-03 17:26 EDT 23 TCP
Nmap scan report for 10.10.5.204 192.168.157.128 TCP
Host is up (2.0s latency). VMware_9a:3f:ca VMware_f8:76:f4 ARP
1206 243436 33133 VMware_f8:76:f4 VMware_9a:3f:ca ARP
PORT STATE SERVICE 192.168.157.1 255.255.255.255 UDP
80/tcp closed http 255 192.168.157.1 255.255.255.255 UDP
443/tcp closed https 257 192.168.157.1 255.255.255.255 UDP
1206 243463 49938 192.168.157.1 192.168.157.255 NBNS
Nmap done: 1 IP address (1 host up) scanned in 4.22 seconds 157.255 NBNS

```

No.	Time	Source	Destination	Protocol	Length	Info
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	21 → 41674 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	720 → 41671 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	1089 → 41669 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	1050 → 41671 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	1501 → 41671 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75559..	10.10.5.204	192.168.157.128	TCP	60	705 → 41669 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.75839..	192.168.157.128	10.10.5.204	TCP	58	41669 → 5226 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.76358..	192.168.157.128	10.10.5.204	TCP	58	41669 → 1147 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.76881..	192.168.157.128	10.10.5.204	TCP	58	41669 → 7007 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.77127..	10.10.5.204	192.168.157.128	TCP	60	8192 → 41669 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.77127..	10.10.5.204	192.168.157.128	TCP	60	7002 → 41669 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.77127..	10.10.5.204	192.168.157.128	TCP	60	1122 → 41669 [RST, ACK] Seq=1 Ack=1 Win=64240 Len=0
1209...	243550.77430..	192.168.157.128	10.10.5.204	TCP	58	41669 → 9110 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.77979..	192.168.157.128	10.10.5.204	TCP	58	41669 → 55055 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.78526..	192.168.157.128	10.10.5.204	TCP	58	41669 → 1027 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.79045..	192.168.157.128	10.10.5.204	TCP	58	41669 → 1102 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.79571..	192.168.157.128	10.10.5.204	TCP	58	41669 → 163 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1209...	243550.80117..	192.168.157.128	10.10.5.204	TCP	58	41669 → 2003 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1210...	243550.80665..	192.168.157.128	10.10.5.204	TCP	58	41669 → 1068 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1210...	243550.81182..	192.168.157.128	10.10.5.204	TCP	58	41669 → 255 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1210...	243550.81704..	192.168.157.128	10.10.5.204	TCP	58	41669 → 981 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1210...	243550.82254..	192.168.157.128	10.10.5.204	TCP	58	41669 → 464 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
1210...	243552.36945..	192.168.157.128	10.10.5.204	TCP	58	41675 → 514 [SYN] Seq=0 Win=1024 Len=0 MSS=1460

Utilice el comando nmap -Pn -p 80,443, pero me marcaba que ese puerto estaba bloqueado, por lo que decidí realizarlo hacia todos los puertos

- Solicitudes TCP SYN enviadas directamente a puertos específicos.

Filtros: tcp.flags.syn == 1 && tcp.flags.ack == 0 y tcp.flags.syn == 0 && tcp.flags.ack == 1

No.	Time	Source	Destination	Protocol	Length	Info
80614	172909.10797..	192.168.157.128	10.10.56.131	TCP	58	40524 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80616	172910.10932..	192.168.157.128	10.10.56.131	TCP	58	40526 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80618	172911.11078..	192.168.157.128	10.10.56.131	TCP	58	40528 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80620	172912.11201..	192.168.157.128	10.10.56.131	TCP	58	40530 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80622	172913.11309..	192.168.157.128	10.10.56.131	TCP	58	40532 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80624	172914.11425..	192.168.157.128	10.10.56.131	TCP	58	40534 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80626	172915.11569..	192.168.157.128	10.10.56.131	TCP	58	40536 → 6006 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80628	172916.11692..	192.168.157.128	10.10.56.131	TCP	58	40538 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80630	172917.11816..	192.168.157.128	10.10.56.131	TCP	58	40538 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80632	172918.11974..	192.168.157.128	10.10.56.131	TCP	58	40593 → 5986 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80634	172919.12084..	192.168.157.128	10.10.56.131	TCP	58	40520 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80636	172920.12208..	192.168.157.128	10.10.56.131	TCP	58	40522 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80638	172921.12348..	192.168.157.128	10.10.56.131	TCP	58	40524 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80640	172922.12472..	192.168.157.128	10.10.56.131	TCP	58	40526 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80642	172923.12591..	192.168.157.128	10.10.56.131	TCP	58	40528 → 3369 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80654	172968.21547..	192.168.157.128	10.10.56.131	TCP	58	47877 → 443 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80661	172968.30289..	192.168.157.128	10.10.56.131	TCP	58	48133 → 53 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80662	172968.30308..	192.168.157.128	10.10.56.131	TCP	58	48133 → 256 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80663	172968.30318..	192.168.157.128	10.10.56.131	TCP	58	48133 → 8080 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80664	172968.30329..	192.168.157.128	10.10.56.131	TCP	58	48133 → 143 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80665	172968.30340..	192.168.157.128	10.10.56.131	TCP	58	48133 → 22 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80666	172968.30347..	192.168.157.128	10.10.56.131	TCP	58	48133 → 993 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80667	172968.30355..	192.168.157.128	10.10.56.131	TCP	58	48133 → 139 [SYN] Seq=0 Win=1024 Len=0 MSS=1460
80668	172968.30362..	192.168.157.128	10.10.56.131	TCP	58	48133 → 445 [SYN] Seq=0 Win=1024 Len=0 MSS=1460

Frame 80642: 58 bytes on wire (464 bits), 58 bytes captured (464 bits) on interface
 Ethernet II, Src: VMware_9a:3f:ca (00:0c:29:9a:3f:ca), Dst: VMware_f8:76:00:00:00:00
 Internet Protocol Version 4, Src: 192.168.157.128, Dst: 10.10.56.131
 Transmission Control Protocol, Src Port: 40528, Dst Port: 3369, Seq: 0, Win: 0, Len: 0

```
(kali㉿kali)-[~]
$ nmap -sS -p 80,443 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-03 17:47 EDT
Nmap scan report for 10.10.5.204
Host is up (0.00068s latency).

PORT      STATE      SERVICE
80/tcp    filtered  http
443/tcp    filtered  https

Nmap done: 1 IP address (1 host up) scanned in 1.43 seconds
```

Capturing from eth0

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tcp.flags.syn == 1 && tcp.flags.ack == 1

No.	Time	Source	Destination	Protocol	Length	Info
75342	172194.27319...	10.10.56.131	192.168.157.128	TCP	60	2968 → 47670 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
75896	172196.68004...	10.10.56.131	192.168.157.128	TCP	60	5432 → 47674 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
77557	172570.95230...	10.10.56.131	192.168.157.128	TCP	60	139 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
77558	172570.95230...	10.10.56.131	192.168.157.128	TCP	60	445 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
77592	172570.95908...	10.10.56.131	192.168.157.128	TCP	60	135 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78456	172575.69909...	10.10.56.131	192.168.157.128	TCP	60	139 → 40521 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78458	172575.69861...	10.10.56.131	192.168.157.128	TCP	60	139 → 40523 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78460	172575.70024...	10.10.56.131	192.168.157.128	TCP	60	139 → 40525 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78466	172577.61358...	10.10.56.131	192.168.157.128	TCP	60	139 → 40527 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78518	172577.61988...	10.10.56.131	192.168.157.128	TCP	60	5432 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
78549	172577.62555...	10.10.56.131	192.168.157.128	TCP	60	2968 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80257	172758.88278...	10.10.56.131	192.168.157.128	TCP	60	902 → 40516 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80671	172968.30477...	10.10.56.131	192.168.157.128	TCP	60	139 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80672	172968.30477...	10.10.56.131	192.168.157.128	TCP	60	445 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80703	172969.50054...	10.10.56.131	192.168.157.128	TCP	60	135 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80920	172970.51005...	10.10.56.131	192.168.157.128	TCP	60	5432 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
80986	172970.53503...	10.10.56.131	192.168.157.128	TCP	60	5357 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
81094	172970.72552...	10.10.56.131	192.168.157.128	TCP	60	902 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
81096	172970.72667...	10.10.56.131	192.168.157.128	TCP	60	7070 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
81250	172970.93078...	10.10.56.131	192.168.157.128	TCP	60	2968 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
83793	172976.18666...	10.10.56.131	192.168.157.128	TCP	60	912 → 48133 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
83797	172976.19093...	10.10.56.131	192.168.157.128	TCP	60	139 → 48138 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
83799	172976.19640...	10.10.56.131	192.168.157.128	TCP	60	912 → 48135 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460
83803	172976.20207...	10.10.56.131	192.168.157.128	TCP	60	139 → 48140 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460

Frame 80257: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on
Ethernet II, Src: VMware_f8:76:f4 (00:50:56:f8:76:f4), Dst: VMware_9a:3f:ca
Internet Protocol Version 4, Src: 10.10.56.131, Dst: 192.168.157.128
Transmission Control Protocol, Src Port: 902, Dst Port: 40516, Seq: 0, A

```
(kali㉿kali)-[~]
$ nmap -sS -p 21,22 10.10.5.204
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-03 17:50 EDT
Nmap scan report for 10.10.5.204
Host is up (0.0015s latency).

PORT      STATE      SERVICE
21/tcp    filtered  ftp
22/tcp    filtered  ssh

Nmap done: 1 IP address (1 host up) scanned in 1.40 seconds
```

Frame 124929: 54 bytes on wire (432 bits), 54 bytes captured (43