



---

## Parte 1

PING da Kali a macchina Windows riuscito dopo aver impostato la regola nel policy set del firewall di Windows

```
(kali㉿kali)-[~]  
$ ping 192.168.50.100  
PING 192.168.50.100 (192.168.50.100) 56(84) bytes of data.  
64 bytes from 192.168.50.100: icmp_seq=1 ttl=64 time=0.049 ms  
64 bytes from 192.168.50.100: icmp_seq=2 ttl=64 time=0.045 ms  
64 bytes from 192.168.50.100: icmp_seq=3 ttl=64 time=0.030 ms  
64 bytes from 192.168.50.100: icmp_seq=4 ttl=64 time=0.028 ms  
64 bytes from 192.168.50.100: icmp_seq=5 ttl=64 time=0.030 ms  
64 bytes from 192.168.50.100: icmp_seq=6 ttl=64 time=0.072 ms  
64 bytes from 192.168.50.100: icmp_seq=7 ttl=64 time=0.025 ms  
64 bytes from 192.168.50.100: icmp_seq=8 ttl=64 time=0.022 ms  
^C  
— 192.168.50.100 ping statistics —  
8 packets transmitted, 8 received, 0% packet loss, time 7174ms  
rtt min/avg/max/mdev = 0.022/0.037/0.072/0.015 ms
```

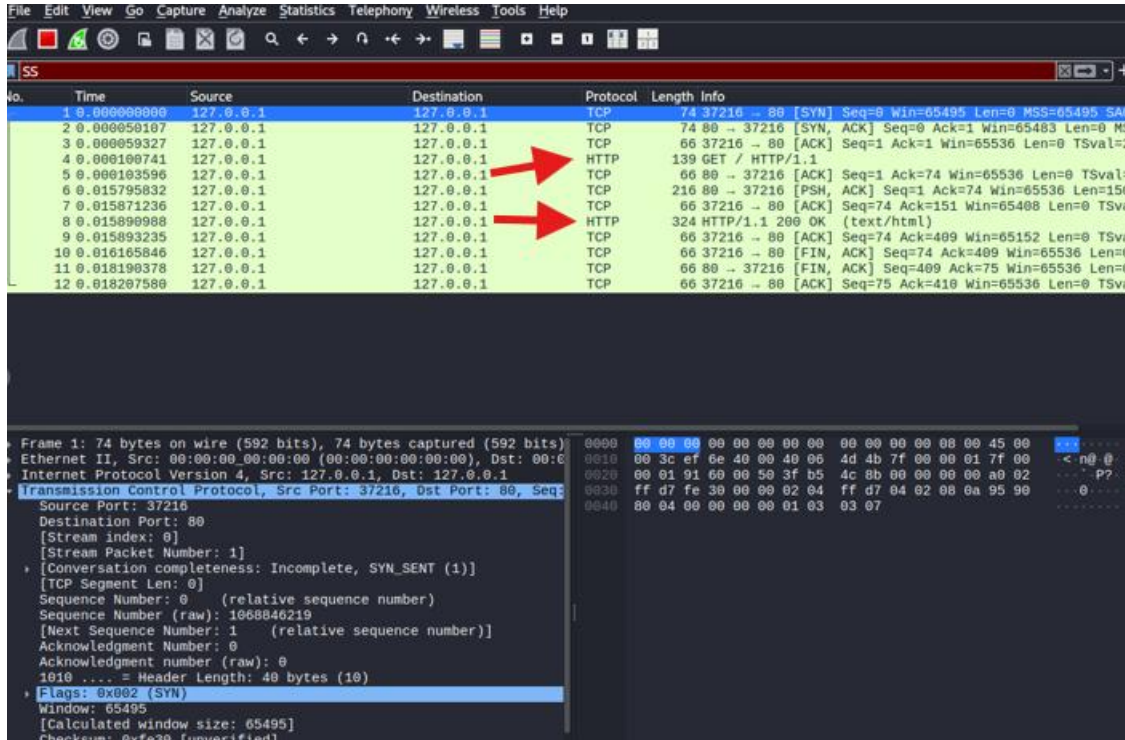


## Parte 2

```
(kali㉿kali)-[~]
$ sudo inetsim
[sudo] password for kali:
INetSim 1.3.2 (2020-05-19) by Matthias Eckert & Thomas Hungenberg
Main logfile '/var/log/inetsim/main.log' does not exist. Trying to create it...
Main logfile '/var/log/inetsim/main.log' successfully created.
Sub logfile '/var/log/inetsim/service.log' does not exist. Trying to create it..
.
Sub logfile '/var/log/inetsim/service.log' successfully created.
Debug logfile '/var/log/inetsim/debug.log' does not exist. Trying to create it..
.
Debug logfile '/var/log/inetsim/debug.log' successfully created.
Using log directory:      /var/log/inetsim/
Using data directory:    /var/lib/inetsim/
Using report directory:  /var/log/inetsim/report/
Using configuration file: /etc/inetsim/inetsim.conf
Parsing configuration file.
Configuration file parsed successfully.
=== INetSim main process started (PID 21010) ===
Session ID:      21010
Listening on:    127.0.0.1
Real Date/Time:  2025-07-11 12:54:14
Fake Date/Time: 2025-07-11 12:54:14 (Delta: 0 seconds)
Forking services ...
* https_443_tcp - started (PID 21020)
done.
Simulation running.
```

```
(kali㉿kali)-[~]
$ curl http://127.0.0.1
<html>
  <head>
    <title>INetSim default HTML page</title>
  </head>
  <body>
    <p></p>
    <p align="center">This is the default HTML page for INetSim HTTP server fake mode.</p>
    <p align="center">This file is an HTML document.</p>
  </body>
</html>
```

Dopo aver lanciato inetsim e il comando curl verso `http://127.0.0.1` su Wireshark vediamo i pacchetti http in transito

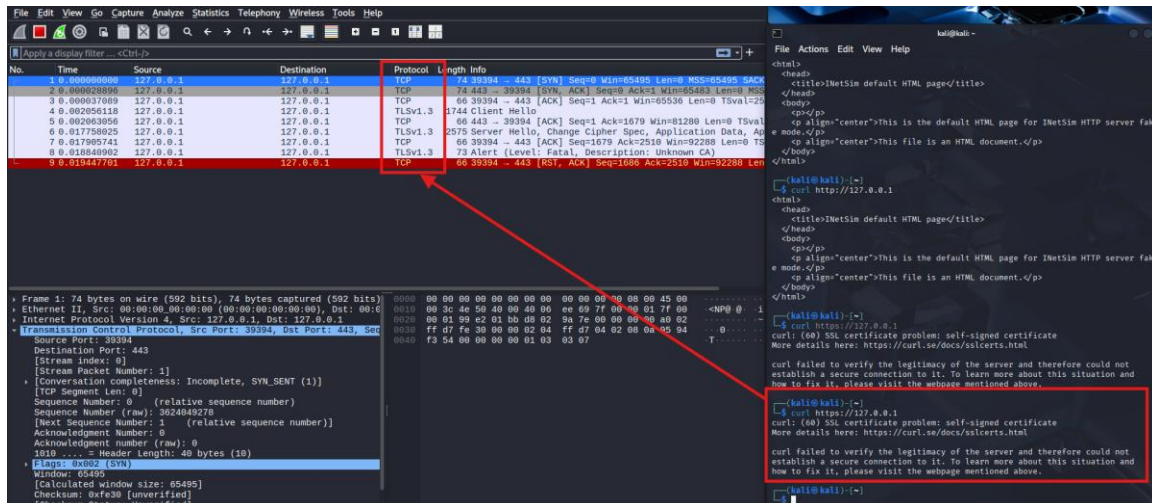


File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000000	127.0.0.1	127.0.0.1	TCP	74	37216 → 80 [SYN] Seq=0 Win=65495 Len=0 MSS=65495 SACK...
2	0.000050167	127.0.0.1	127.0.0.1	TCP	74	80 → 37216 [SYN, ACK] Seq=0 Ack=1 Win=65483 Len=0 MSS...
3	0.000059327	127.0.0.1	127.0.0.1	TCP	66	37216 → 80 [ACK] Seq=1 Ack=1 Win=65536 Len=0 TSval=2...
4	0.000100741	127.0.0.1	127.0.0.1	HTTP	139	GET / HTTP/1.1
5	0.000103596	127.0.0.1	127.0.0.1	TCP	66	80 → 37216 [ACK] Seq=1 Ack=74 Win=65536 Len=0 TSval=...
6	0.015795832	127.0.0.1	127.0.0.1	TCP	216	80 → 37216 [PSH, ACK] Seq=1 Ack=74 Win=65536 Len=156...
7	0.015871236	127.0.0.1	127.0.0.1	TCP	66	37216 → 80 [ACK] Seq=74 Ack=151 Win=65408 Len=0 TSva...
8	0.015890908	127.0.0.1	127.0.0.1	HTTP	324	HTTP/1.1 200 OK (text/html)
9	0.015893235	127.0.0.1	127.0.0.1	TCP	66	37216 → 80 [ACK] Seq=74 Ack=409 Win=65152 Len=0 TSva...
10	0.016165646	127.0.0.1	127.0.0.1	TCP	66	37216 → 80 [FIN, ACK] Seq=74 Ack=409 Win=65536 Len=0...
11	0.018190378	127.0.0.1	127.0.0.1	TCP	66	80 → 37216 [FIN, ACK] Seq=409 Ack=75 Win=65536 Len=0...
12	0.018207580	127.0.0.1	127.0.0.1	TCP	66	37216 → 80 [ACK] Seq=75 Ack=410 Win=65536 Len=0 TSva...

Frame 1: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0  
 Ethernet II, Src: 00:00:00:00:00:00 (00:00:00:00:00:00), Dst: 00:00:00:00:00:00 (00:00:00:00:00:00)  
 Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1  
 Transmission Control Protocol, Src Port: 37216, Dst Port: 80, Seq: 0, Len: 0  
 Source Port: 37216  
 Destination Port: 80  
 [Stream index: 0]  
 [Stream Packet Number: 1]  
 [Conversation completeness: Incomplete, SYN\_SENT (1)]  
 [TCP Segment Len: 0]  
 Sequence Number: 0 (relative sequence number)  
 Sequence Number (raw): 1668846219  
 [Next Sequence Number: 1 (relative sequence number)]  
 Acknowledgment Number: 0  
 Acknowledgment number (raw): 0  
 1610 .... = Header Length: 40 bytes (10)  
 [Flags: 0x002 (SYN)]  
 Window: 65495  
 [Calculated window size: 65495]  
 Checksum: 0xf630 [unverified]

Se invece lanciamo curl verso https://127.0.0.1 non vedremo i pacchetti https perché si tratta di un protocollo più sicuro.



File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000000	127.0.0.1	127.0.0.1	TCP	74	39394 → 443 [SYN] Seq=0 Win=65495 Len=0 MSS=65495 SACK...
2	0.000022096	127.0.0.1	127.0.0.1	TCP	74	443 → 39394 [SYN, ACK] Seq=0 Ack=1 Win=65483 Len=0 MSS...
3	0.000037089	127.0.0.1	127.0.0.1	TCP	66	39394 → 443 [ACK] Seq=1 Ack=1 Win=65536 Len=0 TSval=20...
4	0.000056118	127.0.0.1	127.0.0.1	TLSv1.3	1744	Client Hello
5	0.000063950	127.0.0.1	127.0.0.1	TCP	66	443 → 39394 [ACK] Seq=1 Ack=1079 Win=81280 Len=0 TSval...
6	0.017758025	127.0.0.1	127.0.0.1	TLSv1.3	2575	Server Hello, Change Cipher Spec, Application Data, A...
7	0.017905741	127.0.0.1	127.0.0.1	TCP	66	39394 → 443 [ACK] Seq=1079 Ack=2510 Win=92288 Len=0 TS...
8	0.018040902	127.0.0.1	127.0.0.1	TLSv1.3	73	Alert (Level: Fatal, Description: Unknown CA)
9	0.018447761	127.0.0.1	127.0.0.1	TCP	66	39394 → 443 [RST, ACK] Seq=1086 Ack=2510 Win=92288 Len...

Frame 1: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0  
 Ethernet II, Src: 00:00:00:00:00:00 (00:00:00:00:00:00), Dst: 00:00:00:00:00:00 (00:00:00:00:00:00)  
 Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1  
 Transmission Control Protocol, Src Port: 39394, Dst Port: 443, Seq: 0, Len: 0  
 Source Port: 39394  
 Destination Port: 443  
 [Stream index: 0]  
 [Stream Packet Number: 1]  
 [Conversation completeness: Incomplete, SYN\_SENT (1)]  
 [TCP Segment Len: 0]  
 Sequence Number: 0 (relative sequence number)  
 Sequence Number (raw): 3624849276  
 [Next Sequence Number: 1 (relative sequence number)]  
 Acknowledgment Number: 0  
 Acknowledgment number (raw): 0  
 1610 .... = Header Length: 40 bytes (10)  
 [Flags: 0x002 (SYN)]  
 Window: 65495  
 [Calculated window size: 65495]  
 Checksum: 0xf630 [unverified]  
 [Checksum Status: Unverified]

File Actions Edit View Help

```

<html>
<head>
<title>InetSim default HTML page</title>
</head>
<body>
<p align="center">This is the default HTML page for InetSim HTTP server fak
mode.</p>
<p align="center">This file is an HTML document.</p>
</body>
</html>
  
```

curl failed to verify the legitimacy of the server and therefore could not establish a secure connection to it. To learn more about this situation and how to fix it, please visit the webpage mentioned above.

curl: (60) SSL certificate problem: self-signed certificate  
 More details here: https://curl.se/docs/sslcerts.html

curl: (60) SSL certificate problem: self-signed certificate  
 More details here: https://curl.se/docs/sslcerts.html

curl failed to verify the legitimacy of the server and therefore could not establish a secure connection to it. To learn more about this situation and how to fix it, please visit the webpage mentioned above.