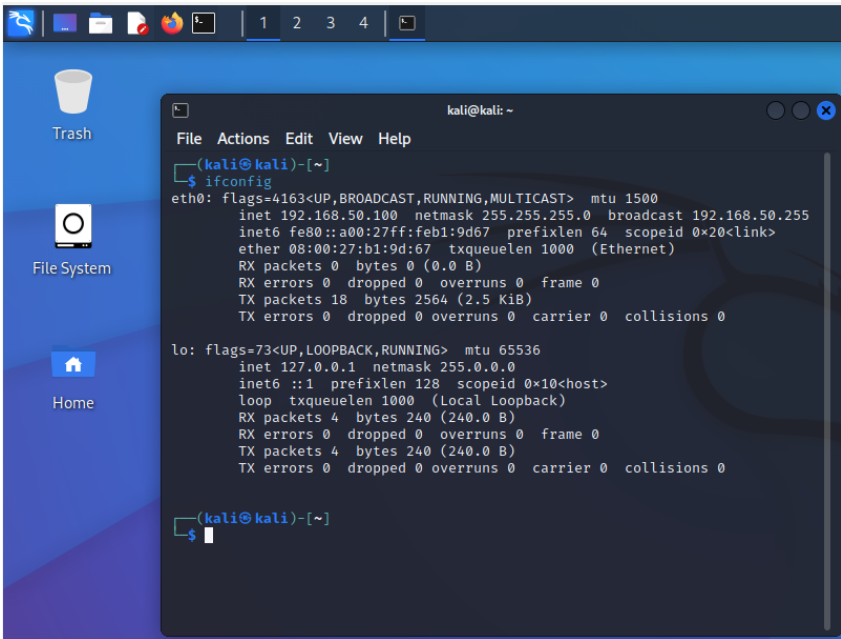


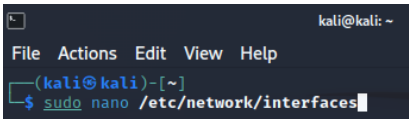
Simulazione di una rete complessa su Oracle Virtual Box

Prerequisiti: Cambiare l'ip su Kali Linux

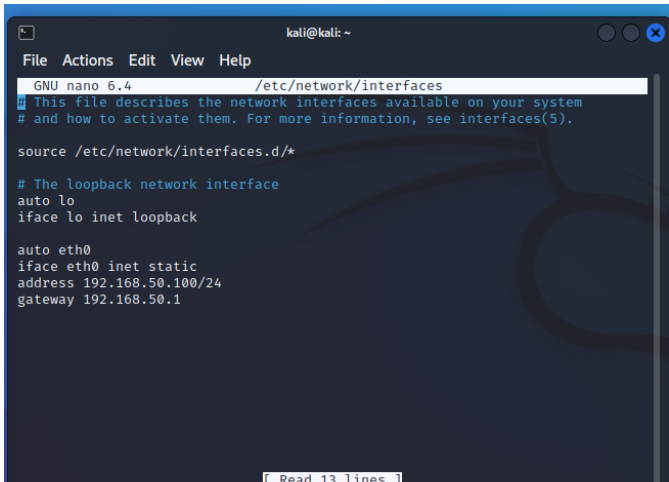
Per iniziare, con ifconfig da terminale, si mostra che l'indirizzo IP iniziale di Kali Linux è 192.168.50.100. Bisogna modificarlo in 192.168.32.100

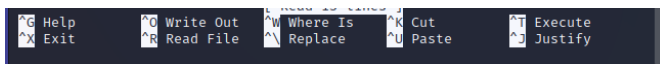


Si selezioni il seguente comando:

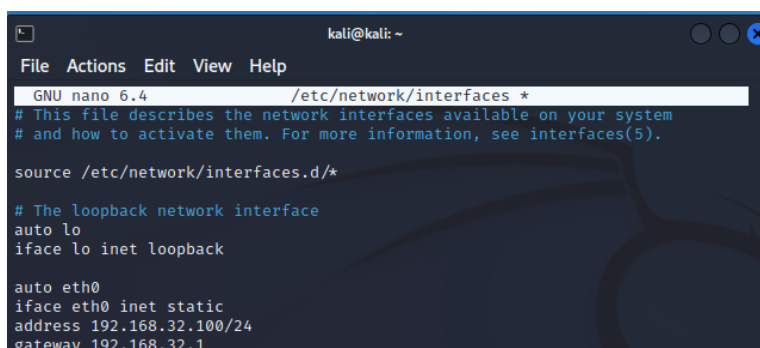


si aprirà la seguente schermata





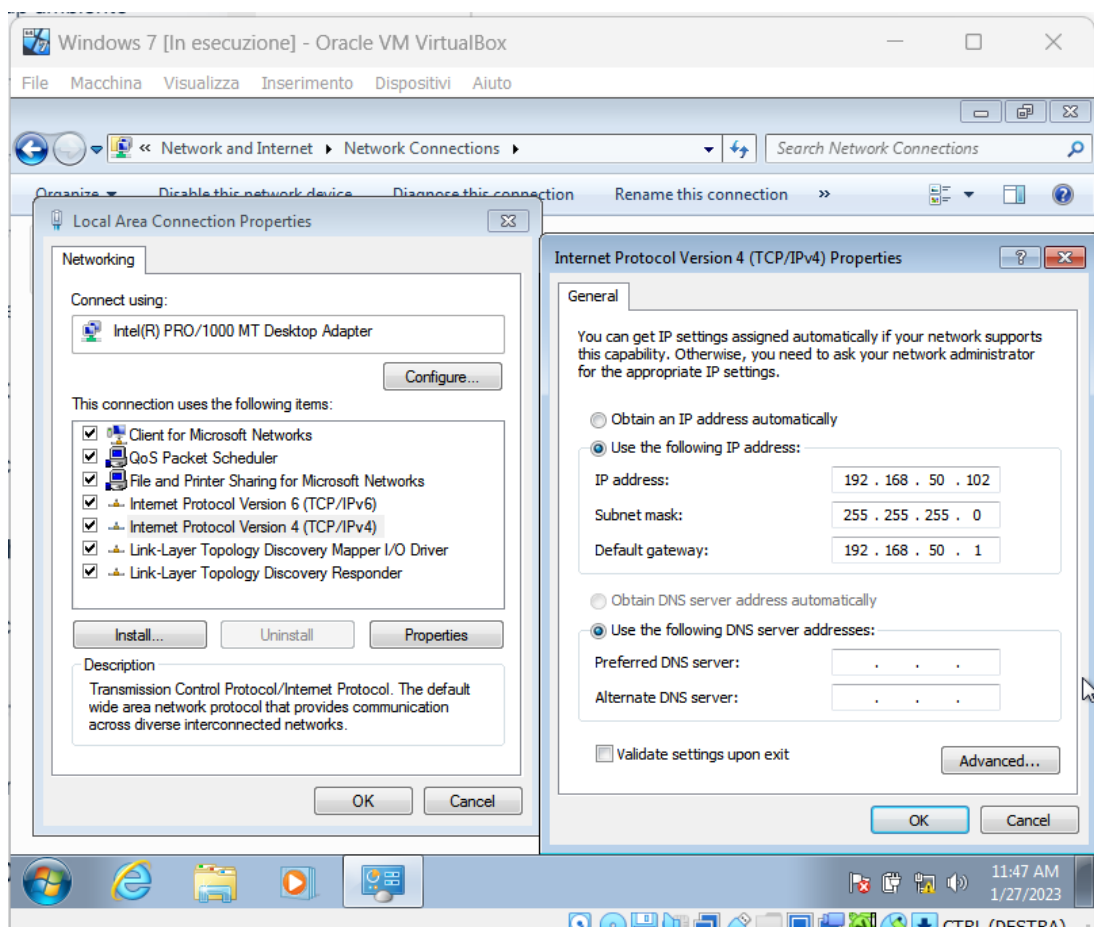
Si andrà pertanto a modificare manualmente l'indirizzo ip



Per poi eseguire i comandi `ctrl o`, `ctrl x` e riavviare Kali Linux, in modo da salvare le modifiche. Una volta riavviato Kali, rieseguire il comando `ifconfig` su terminale per ulteriore conferma.

Cambiare l'IP di Windows 7

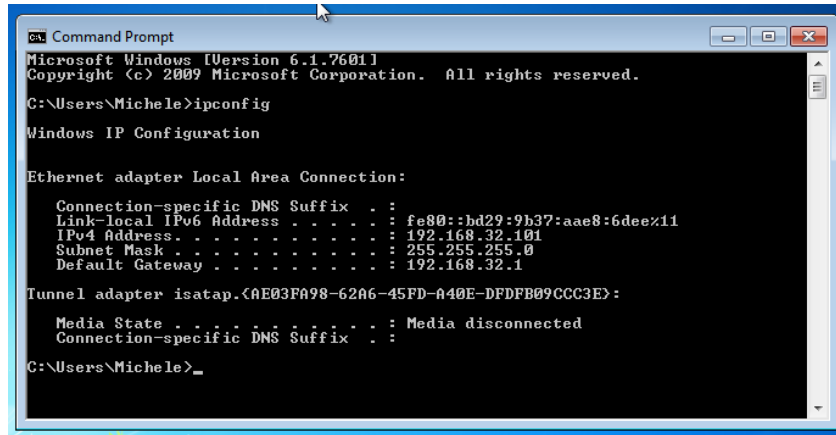
L'indirizzo IP iniziale di Windows 7 è il seguente: 192.168.50.102. E' richiesto di cambiarlo in 192.168.32.101. Sulla seguente schermata sarà possibile farlo manualmente



Default gateway: 192 . 168 . 32 . 1

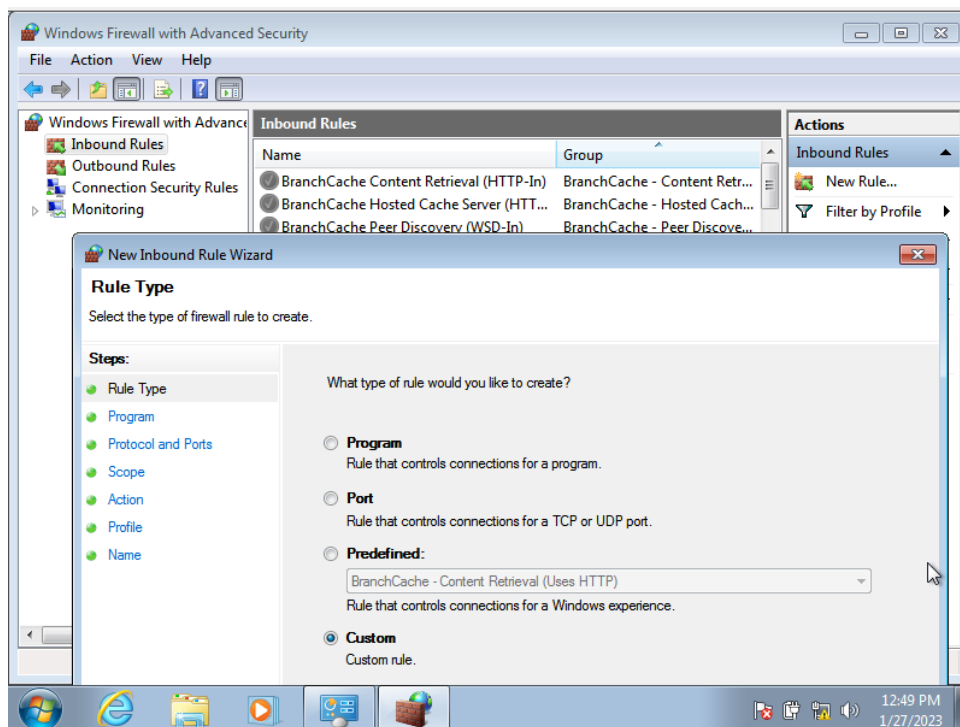
Successivamente, si riavvi Windows per sicurezza e il nuovo indirizzo IP (ovviamente insieme a quello di gateway) verrà salvato.

Per ulteriore conferma basterà andare sul terminale (prompt dei comandi) e digitare ipconfig, come in figura:



Fare pingare i due sistemi operativi

Inizialmente i due sistemi non pingheranno, a causa del firewall presente su windows 7



Does this rule apply to all programs or a specific program?

☒ All programs

Rule applies to all connections on the computer that match other rule properties.

To which ports and protocols does this rule apply?

Protocol type:

Which local IP addresses does this rule apply to?

☒ Any IP address

☐ These IP addresses:

Customize the interface types to which this rule applies:

Which remote IP addresses does this rule apply to?

☒ Any IP address

☐ These IP addresses:

What action should be taken when a connection matches the specified conditions?

☒ **Allow the connection**
This includes connections that are protected with IPsec as well as those are not.

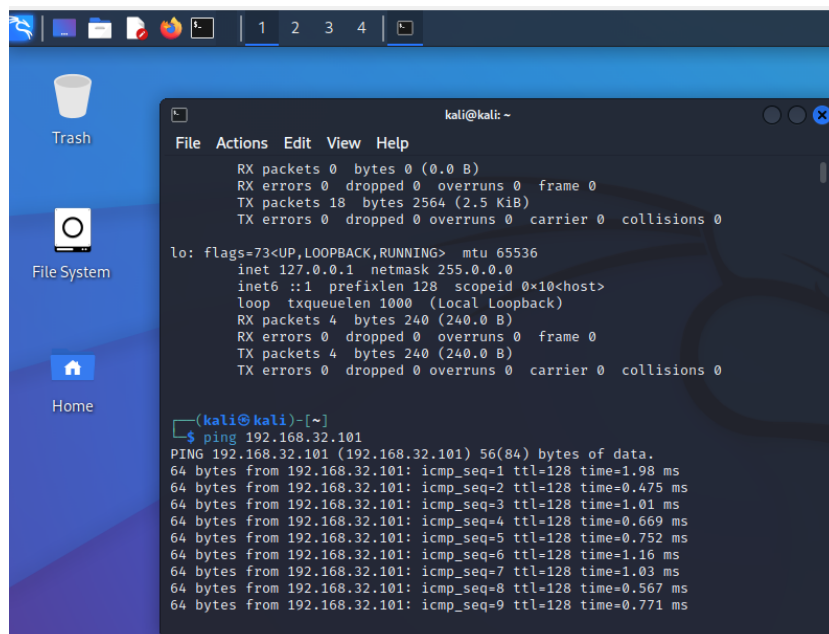
Name:

Description (optional):

Inbound Rules

| Name | Group |
|--------------|-------|
| ✓ allow_ping | |

A questo punto, non resta che mandare il ping da Kali Linux a Windows 7



```
kali@kali: ~
File Actions Edit View Help
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 18 bytes 2564 (2.5 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
inet6 ::1 prefixlen 128 scopeid 0<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 4 bytes 240 (240.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 4 bytes 240 (240.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

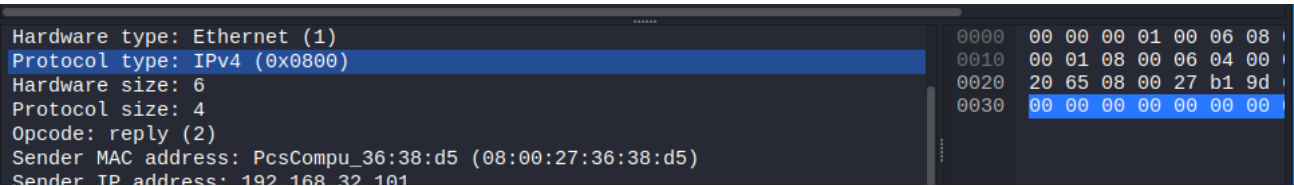
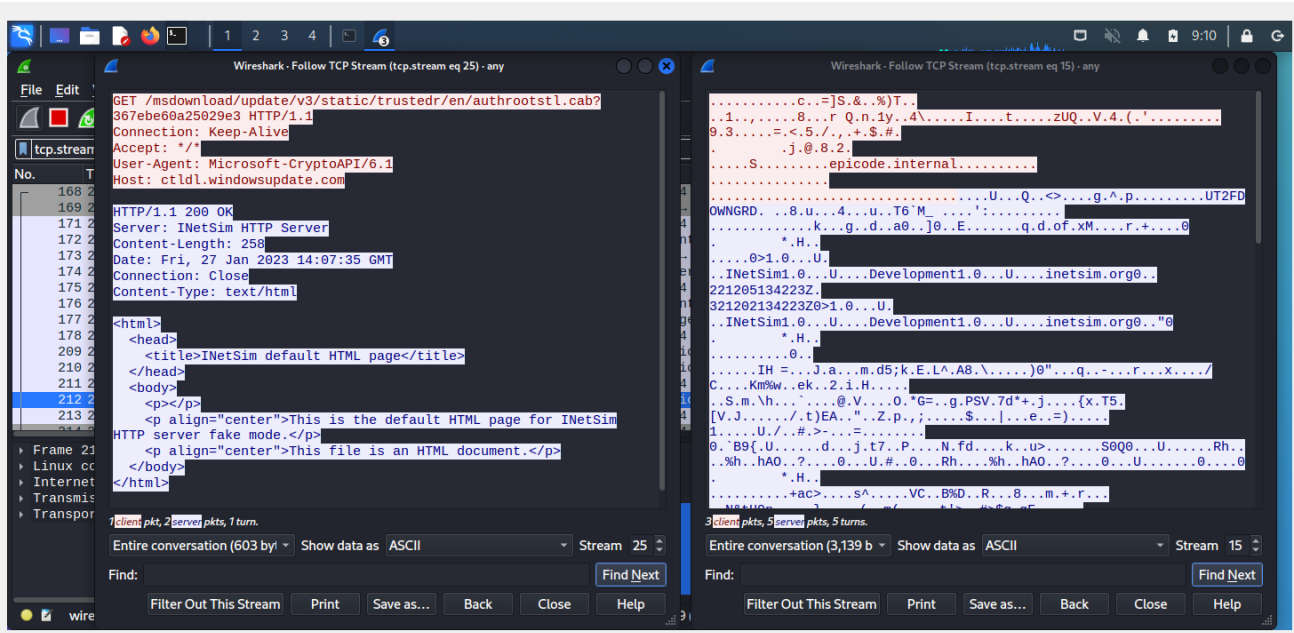
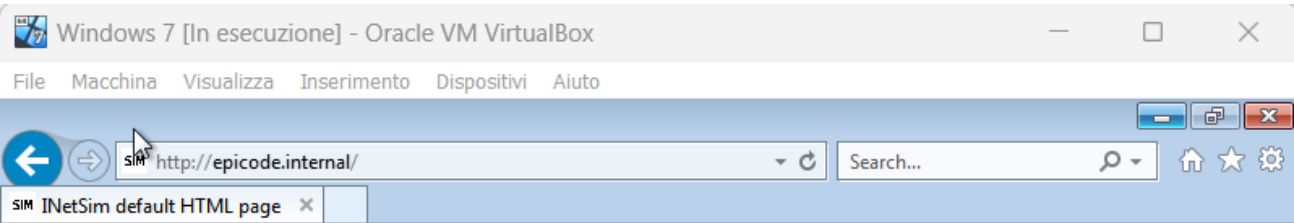
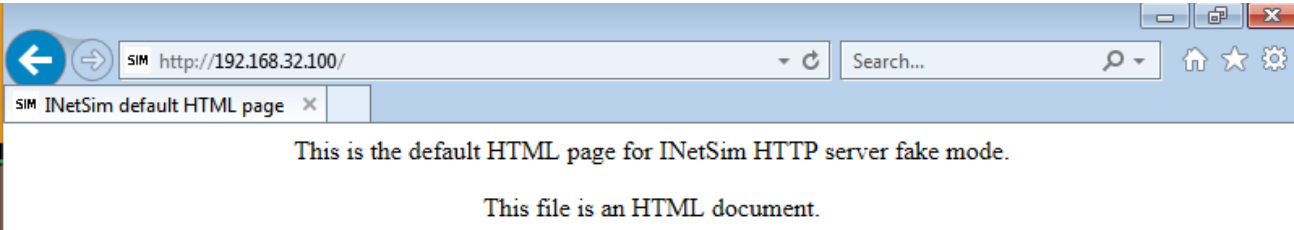
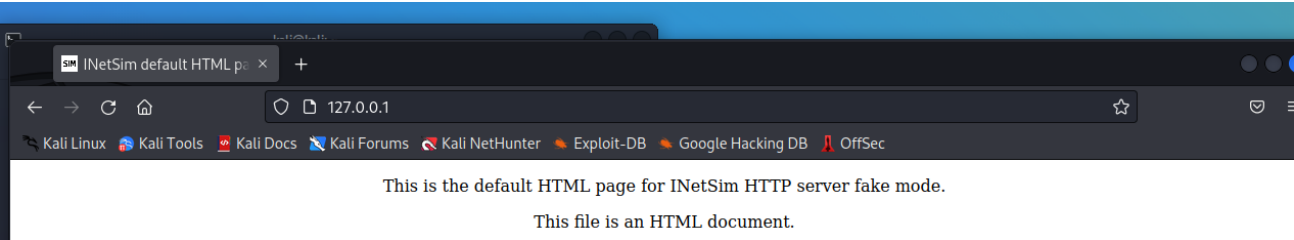
(kali@kali)-[~]
$ ping 192.168.32.101
PING 192.168.32.101 (192.168.32.101) 56(84) bytes of data.
64 bytes from 192.168.32.101: icmp_seq=1 ttl=128 time=1.98 ms
64 bytes from 192.168.32.101: icmp_seq=2 ttl=128 time=0.475 ms
64 bytes from 192.168.32.101: icmp_seq=3 ttl=128 time=1.01 ms
64 bytes from 192.168.32.101: icmp_seq=4 ttl=128 time=0.669 ms
64 bytes from 192.168.32.101: icmp_seq=5 ttl=128 time=0.752 ms
64 bytes from 192.168.32.101: icmp_seq=6 ttl=128 time=1.16 ms
64 bytes from 192.168.32.101: icmp_seq=7 ttl=128 time=1.03 ms
64 bytes from 192.168.32.101: icmp_seq=8 ttl=128 time=0.567 ms
64 bytes from 192.168.32.101: icmp_seq=9 ttl=128 time=0.771 ms

^C
— 192.168.32.101 ping statistics —
728 packets transmitted, 728 received, 0% packet loss, time 741548ms
rtt min/avg/max/mdev = 0.420/1.278/17.418/0.902 ms

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



Esercizi



Sender IP address: 192.168.32.101
Target MAC address: PcsCompu_b1:9d:67 (08:00:27:b1:9d:67)
Target IP address: 192.168.32.100



Address Resolution Protocol (arp), 28 bytes

Packets: 318 · Displayed: 4 (1.3%)

Profile: Default

