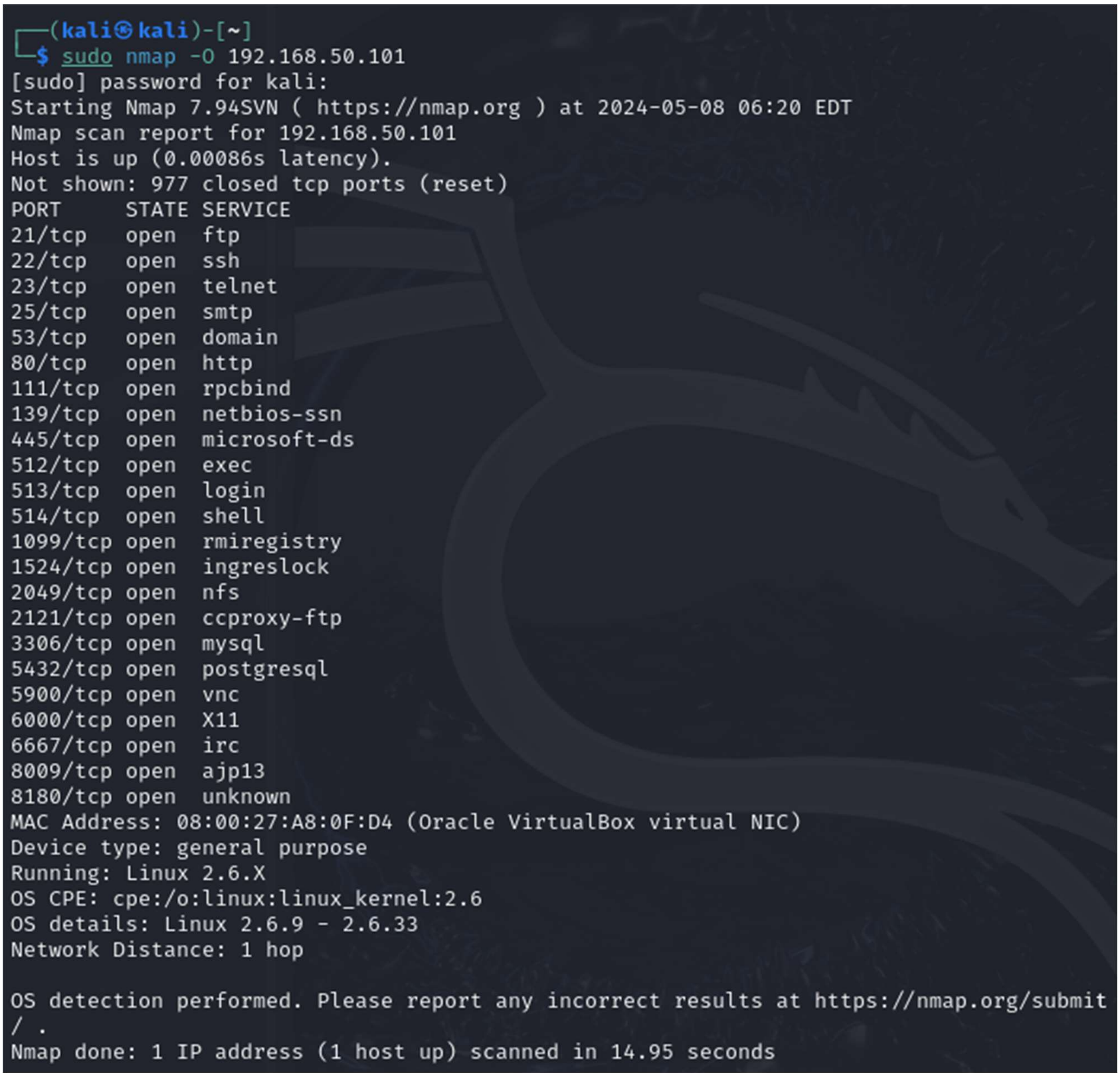
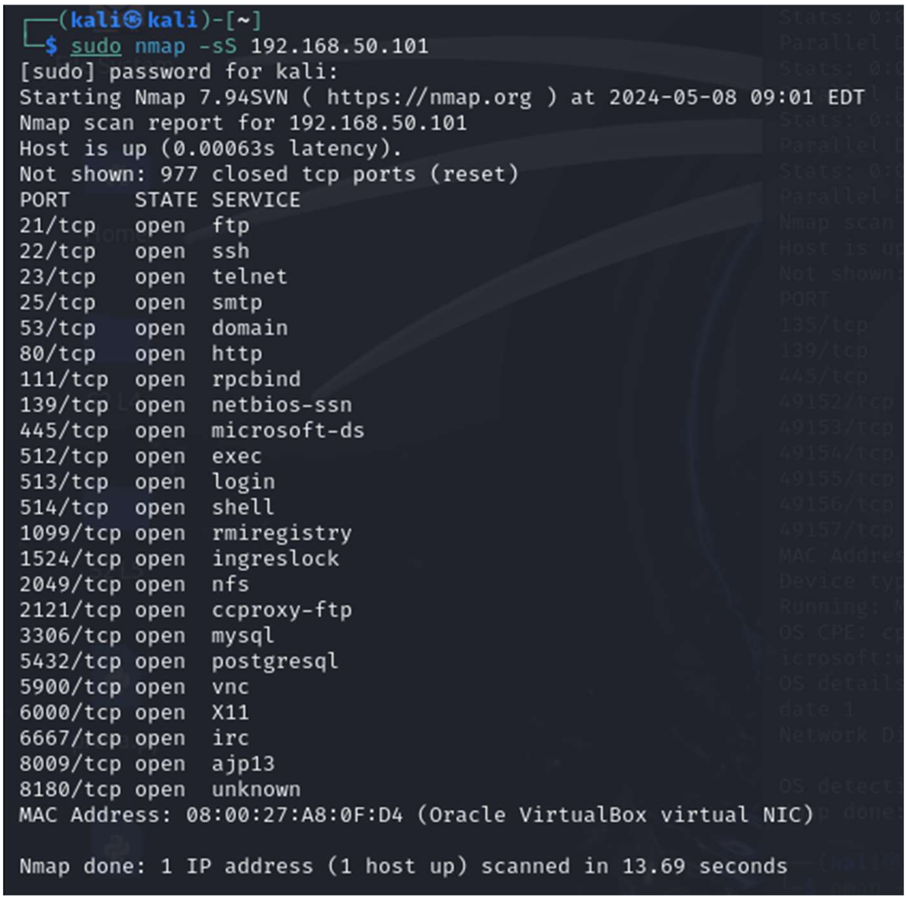
Scansione dei servizi con nmap

Metasploitable:

La prima scansione che ho eseguito è una scanzione OS senza switch.

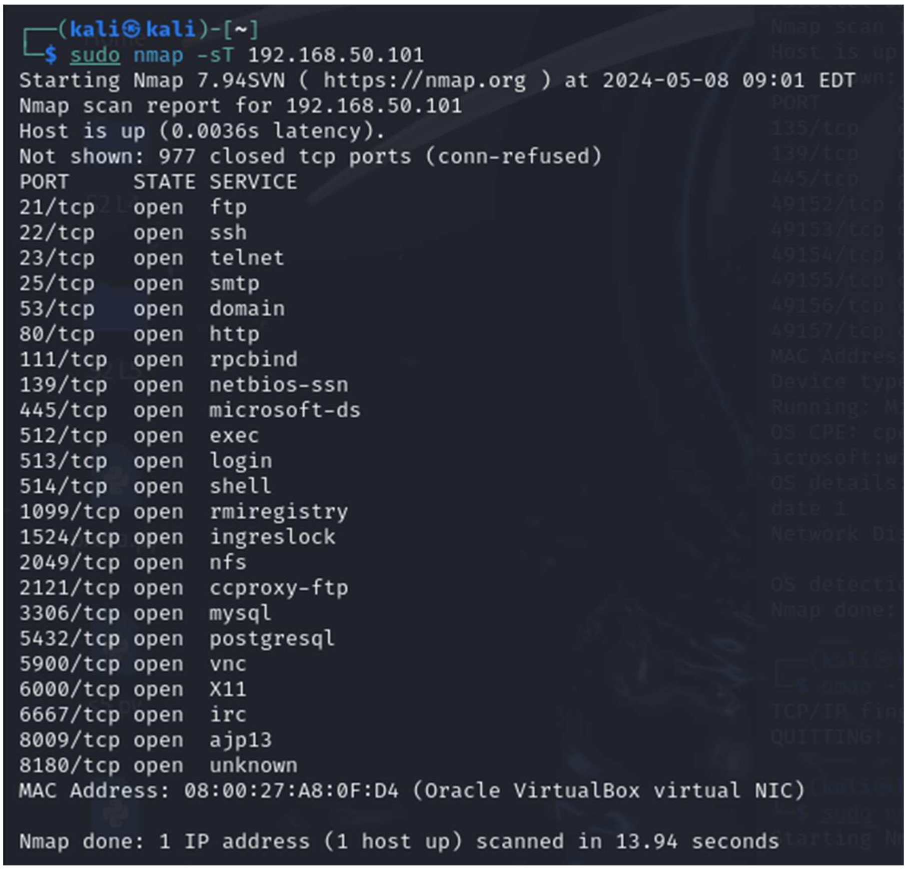


```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.101
[sudo] password for kali:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 06:20 EDT
Nmap scan report for 192.168.50.101
Host is up (0.00086s latency).
Not shown: 977 closed tcp ports (reset)
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   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
MAC Address: 08:00:27:A8:0F:D4 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
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 14.95 seconds
```



```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sS 192.168.50.101
[sudo] password for kali:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 09:01 EDT
Nmap scan report for 192.168.50.101
Host is up (0.00063s 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
MAC Address: 08:00:27:A8:0F:D4 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 13.69 seconds
```

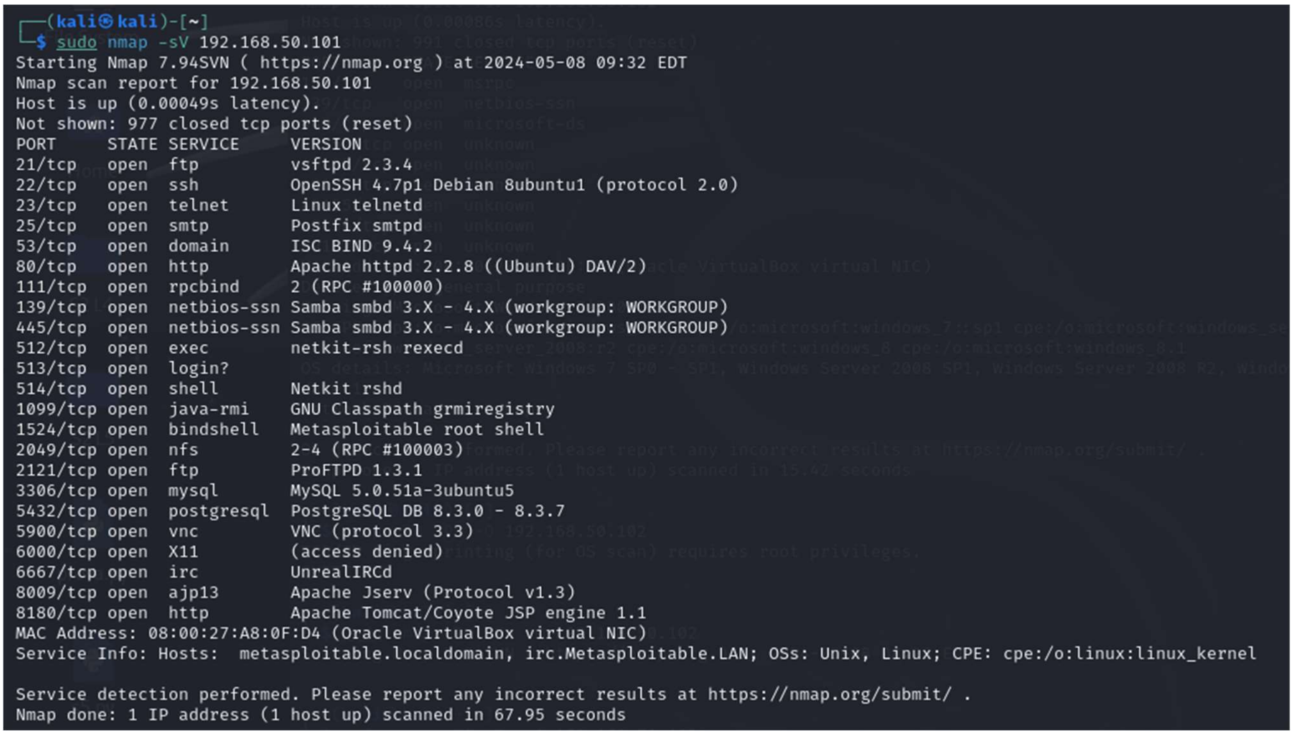
Poi ho eseguito un Syn scan



```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sT 192.168.50.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 09:01 EDT
Nmap scan report for 192.168.50.101
Host is up (0.0036s 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
MAC Address: 08:00:27:A8:0F:D4 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 13.94 seconds
```

e un TCP connect, ma non ho notato differenze.

Infine ho eseguito con la feature version detection

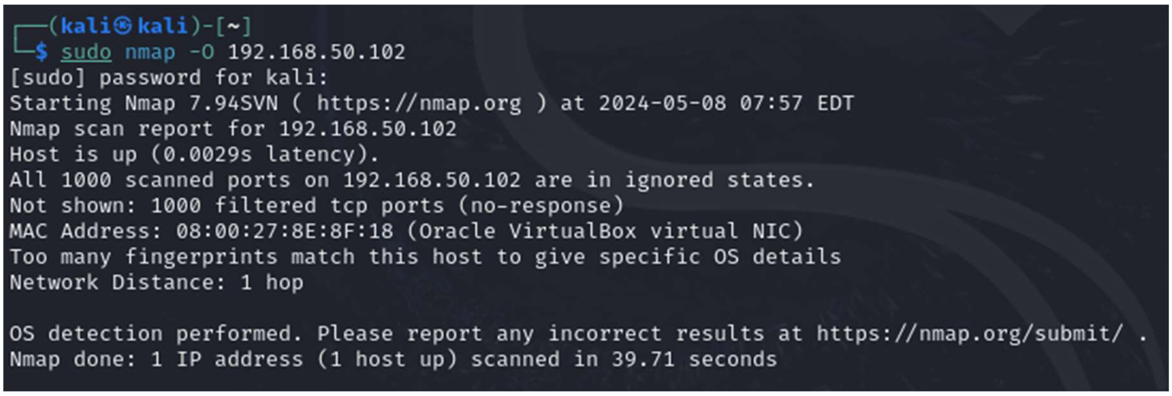


```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sV 192.168.50.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 09:32 EDT
Nmap scan report for 192.168.50.101
Host is up (0.00049s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE     VERSION
21/tcp    open  ftp         vsftpd 2.3.4
22/tcp    open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet      Linux telnetd
25/tcp    open  smtp        Postfix smtpd
53/tcp    open  domain      ISC BIND 9.4.2
80/tcp    open  http        Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp   open  rpcbind     2 (RPC #100000)
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp   open  exec        netkit-rsh rexecd
513/tcp   open  login?
514/tcp   open  shell       Netkit rshd
1099/tcp open  java-rmi    GNU Classpath grmiregistry
1524/tcp open  bindshell   Metasploitable root shell
2049/tcp open  nfs         2-4 (RPC #100003)
2121/tcp open  ftp         ProFTPD 1.3.1
3306/tcp open  mysql       MySQL 5.0.51a-3ubuntu5
5432/tcp open  postgresql  PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open  vnc         VNC (protocol 3.3)
6000/tcp open  X11         (access denied)
6667/tcp open  irc         UnrealIRCd
8009/tcp open  ajp13       Apache Jserv (Protocol v1.3)
8180/tcp open  http        Apache Tomcat/Coyote JSP engine 1.1
MAC Address: 08:00:27:A8:0F:D4 (Oracle VirtualBox virtual NIC)
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 67.95 seconds
```

Per le scansioni su Metasploitable non ho avuto nessun problema visto che è un sistema aperto e non ha nessuna protezione.

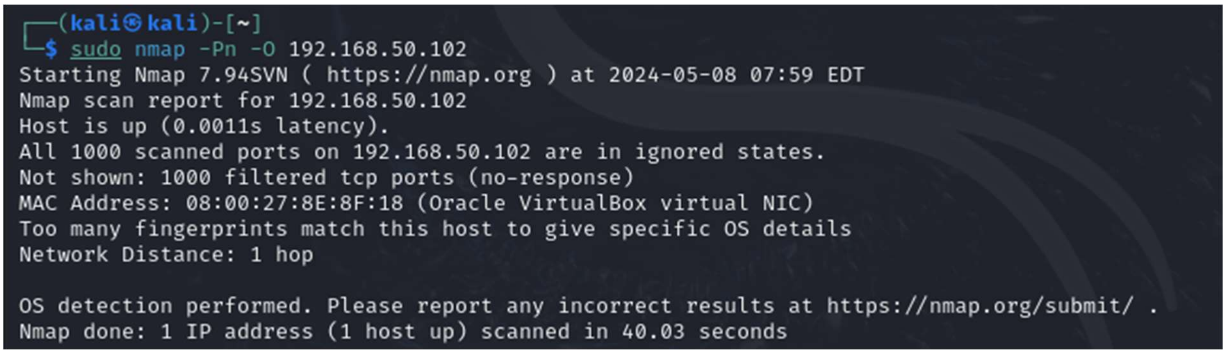
Windows 7

Ho eseguito una scansione OS su windows ma non ha prodotto nessun risultato

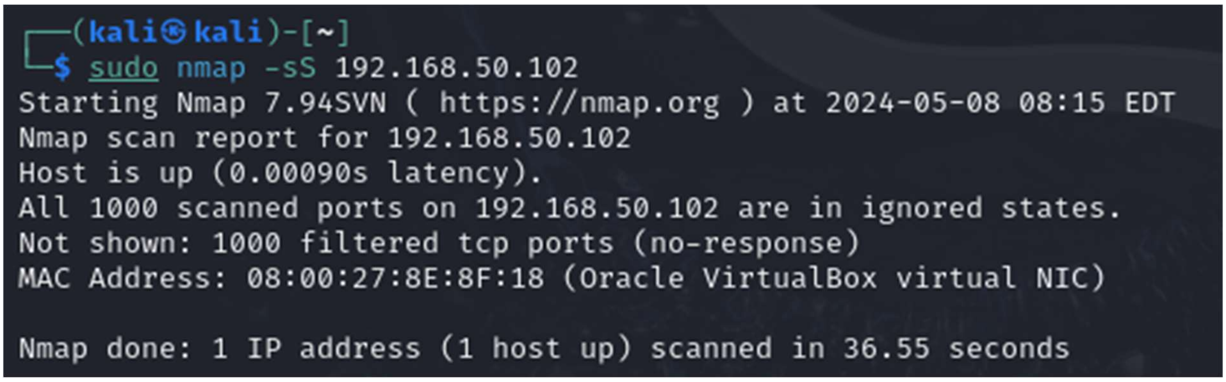


```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.102
[sudo] password for kali:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 07:57 EDT
Nmap scan report for 192.168.50.102
Host is up (0.0029s latency).
All 1000 scanned ports on 192.168.50.102 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:8E:8F:18 (Oracle VirtualBox virtual NIC)
Too many fingerprints match this host to give specific OS details
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 39.71 seconds
```

Poi ho provato una scansione OS con lo switch -Pn che disabilita il ping e una scansione Syn scan ma anche queste non sono riuscite

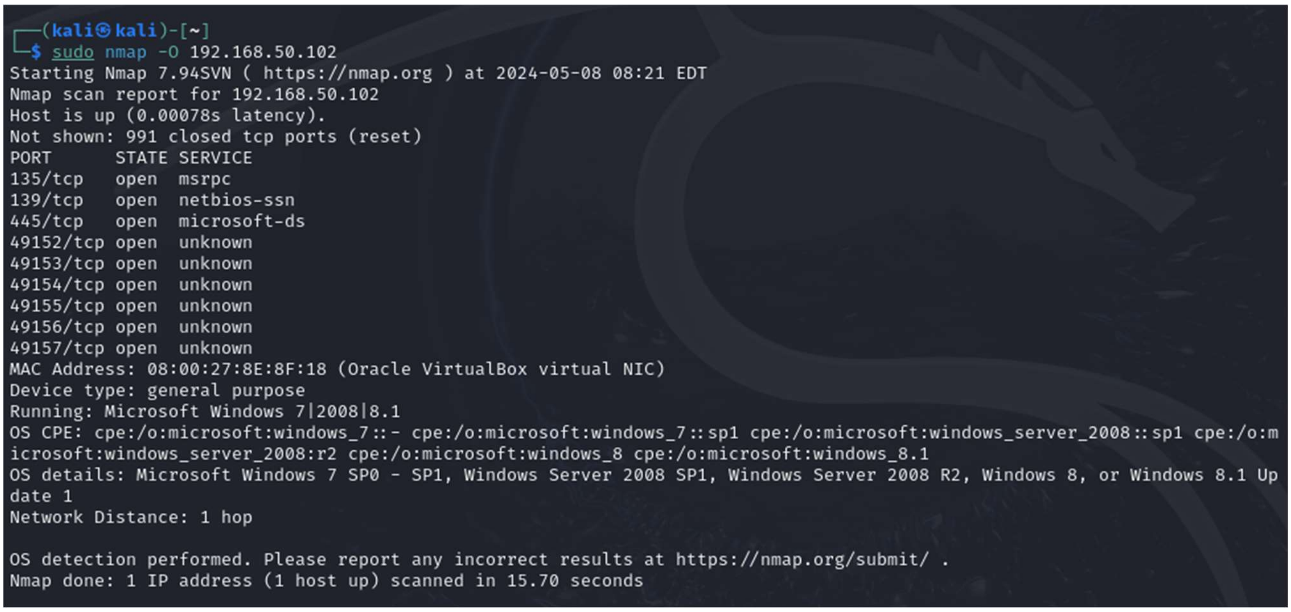


```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -Pn -O 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 07:59 EDT
Nmap scan report for 192.168.50.102
Host is up (0.0011s latency).
All 1000 scanned ports on 192.168.50.102 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:8E:8F:18 (Oracle VirtualBox virtual NIC)
Too many fingerprints match this host to give specific OS details
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 40.03 seconds
```



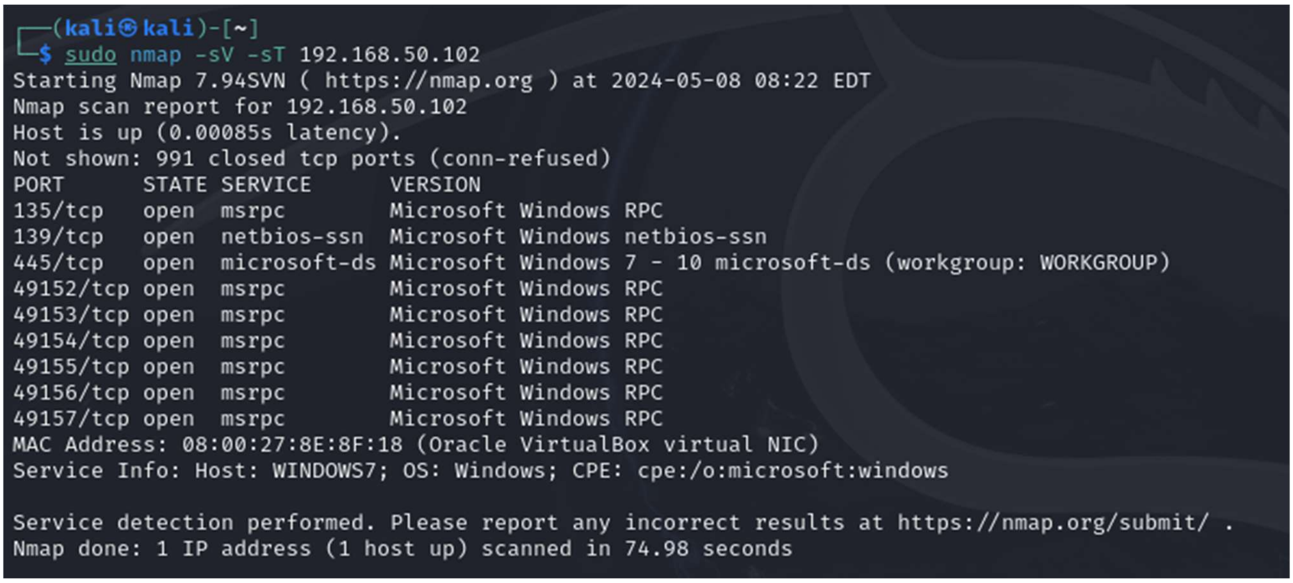
```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sS 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 08:15 EDT
Nmap scan report for 192.168.50.102
Host is up (0.00090s latency).
All 1000 scanned ports on 192.168.50.102 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:8E:8F:18 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 36.55 seconds
```

Infine ho provato ha disattivare il firewall di Windows 7 in modo che le connessioni in entrata non fossero bloccate e con una semplice scansione OS ho ottenuto le porte aperte



```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 08:21 EDT
Nmap scan report for 192.168.50.102
Host is up (0.00078s 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
49152/tcp open  unknown
49153/tcp open  unknown
49154/tcp open  unknown
49155/tcp open  unknown
49156/tcp open  unknown
49157/tcp open  unknown
MAC Address: 08:00:27:8E:8F:18 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Microsoft Windows 7|2008|8.1
OS CPE: cpe:/o:microsoft:windows_7::- cpe:/o:microsoft:windows_7::sp1 cpe:/o:microsoft:windows_server_2008::sp1 cpe:/o:m
icrosoft: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 Up
date 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 15.70 seconds
```

però alcuni servizi sono sconosciuti, quindi ho usato una scansione TCP con lo switch version detection e ho ottenuto tutte le informazioni.



```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sV -sT 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-08 08:22 EDT
Nmap scan report for 192.168.50.102
Host is up (0.00085s latency).
Not shown: 991 closed tcp ports (conn-refused)
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)
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
49157/tcp open  msrpc        Microsoft Windows RPC
MAC Address: 08:00:27:8E:8F:18 (Oracle VirtualBox virtual NIC)
Service Info: Host: WINDOWS7; 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 74.98 seconds
```