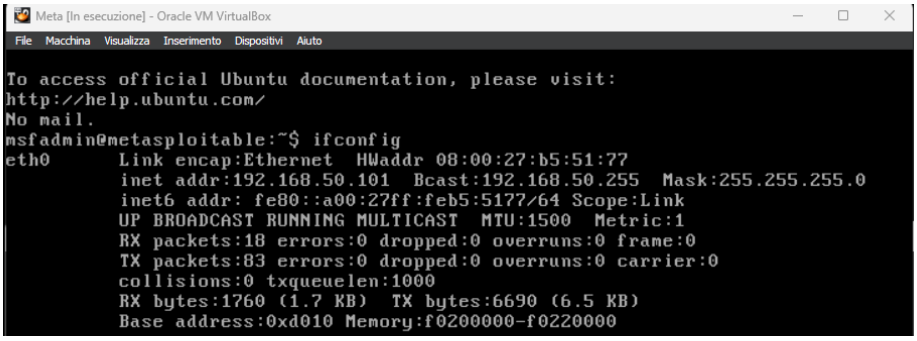
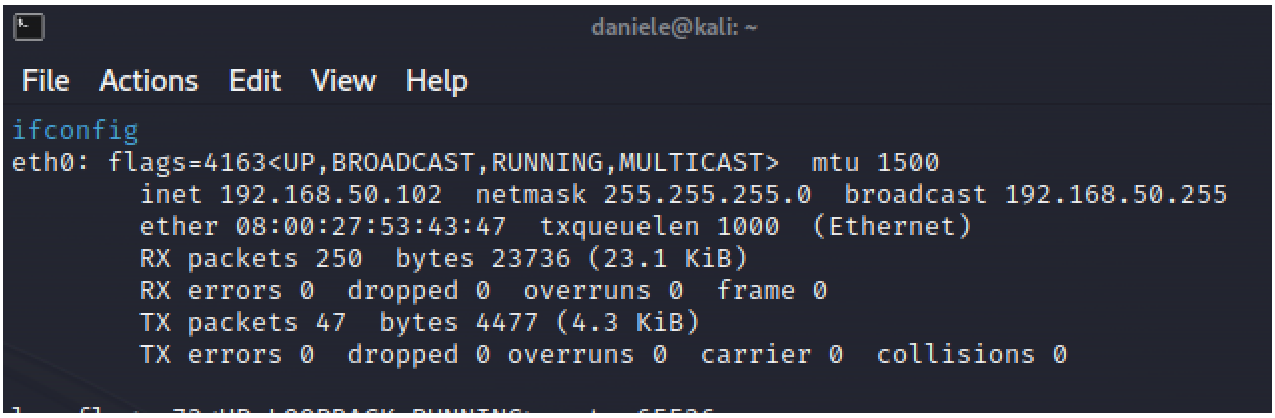
Setting ip Meta


Meta [In esecuzione] - Oracle VM VirtualBox
File Macchina Visualizza Inserimento Dispositivi Aiuto

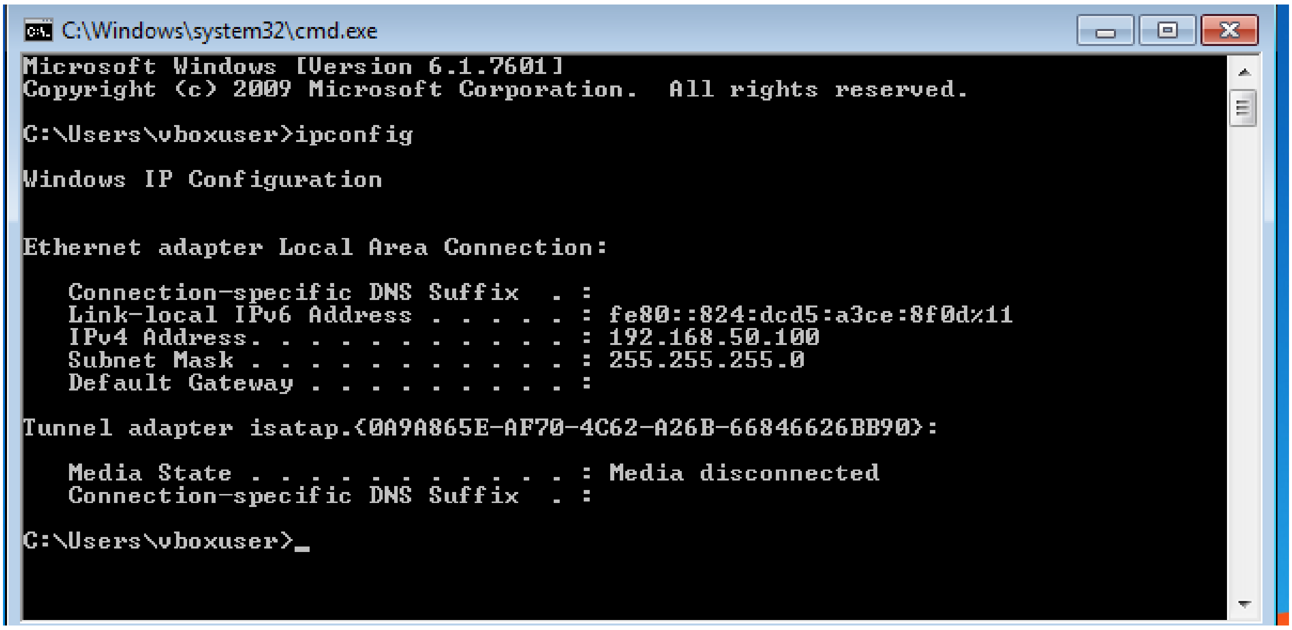
```
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:b5:51:77
          inet addr:192.168.50.101  Bcast:192.168.50.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:feb5:5177/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:18 errors:0 dropped:0 overruns:0 frame:0
          TX packets:83 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1760 (1.7 KB)  TX bytes:6690 (6.5 KB)
          Base address:0xd010 Memory:f0200000-f0220000
```

Ip Kali



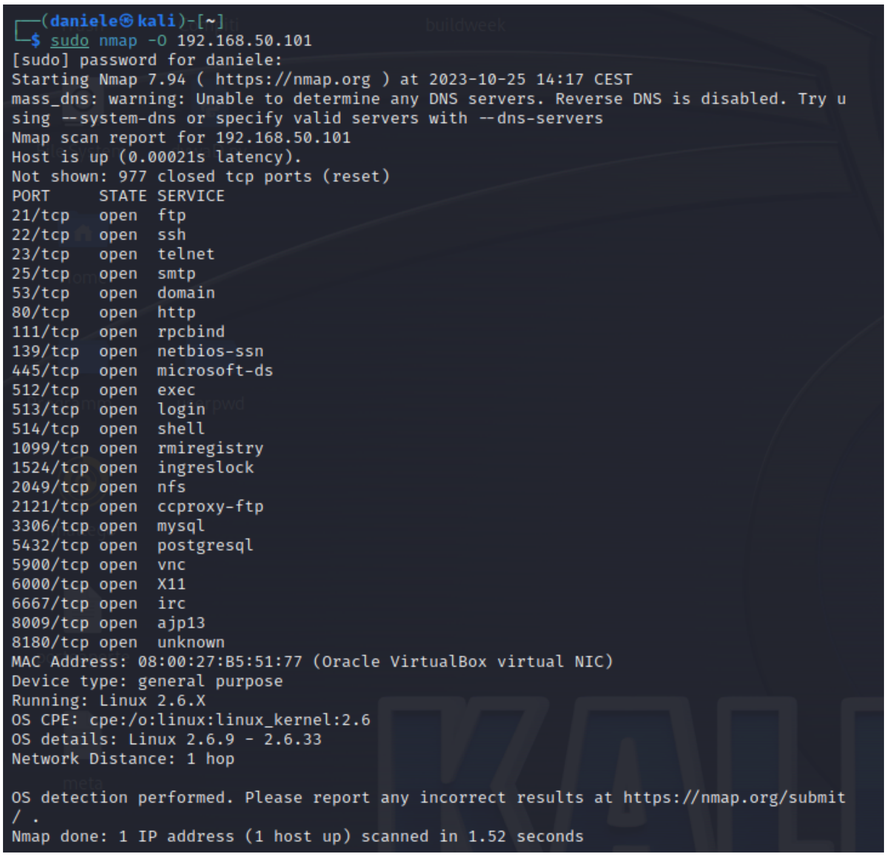
```
ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.50.102  netmask 255.255.255.0  broadcast 192.168.50.255
        ether 08:00:27:53:43:47  txqueuelen 1000  (Ethernet)
        RX packets 250  bytes 23736 (23.1 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 47  bytes 4477 (4.3 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

Ip Windows 7



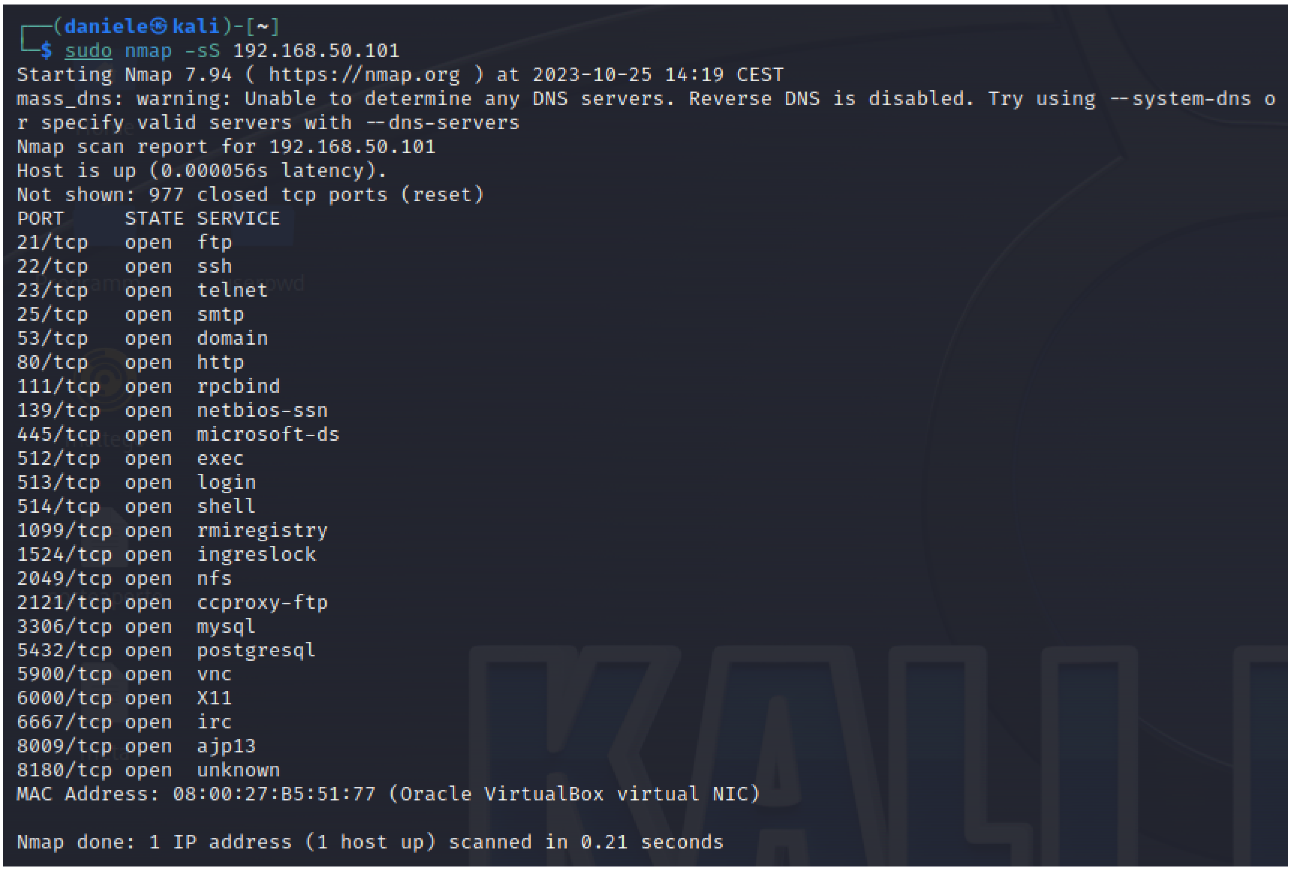
```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\vboxuser>ipconfig

Windows IP Configuration


Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::824:dcd5:a3ce:8f0d%11
   IPv4 Address. . . . . . . . . . . : 192.168.50.100
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . :

Tunnel adapter isatap.{0A9A865E-AF70-4C62-A26B-66846626BB90}:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

C:\Users\vboxuser>_
```

Risultato OS fingerprint verso meta



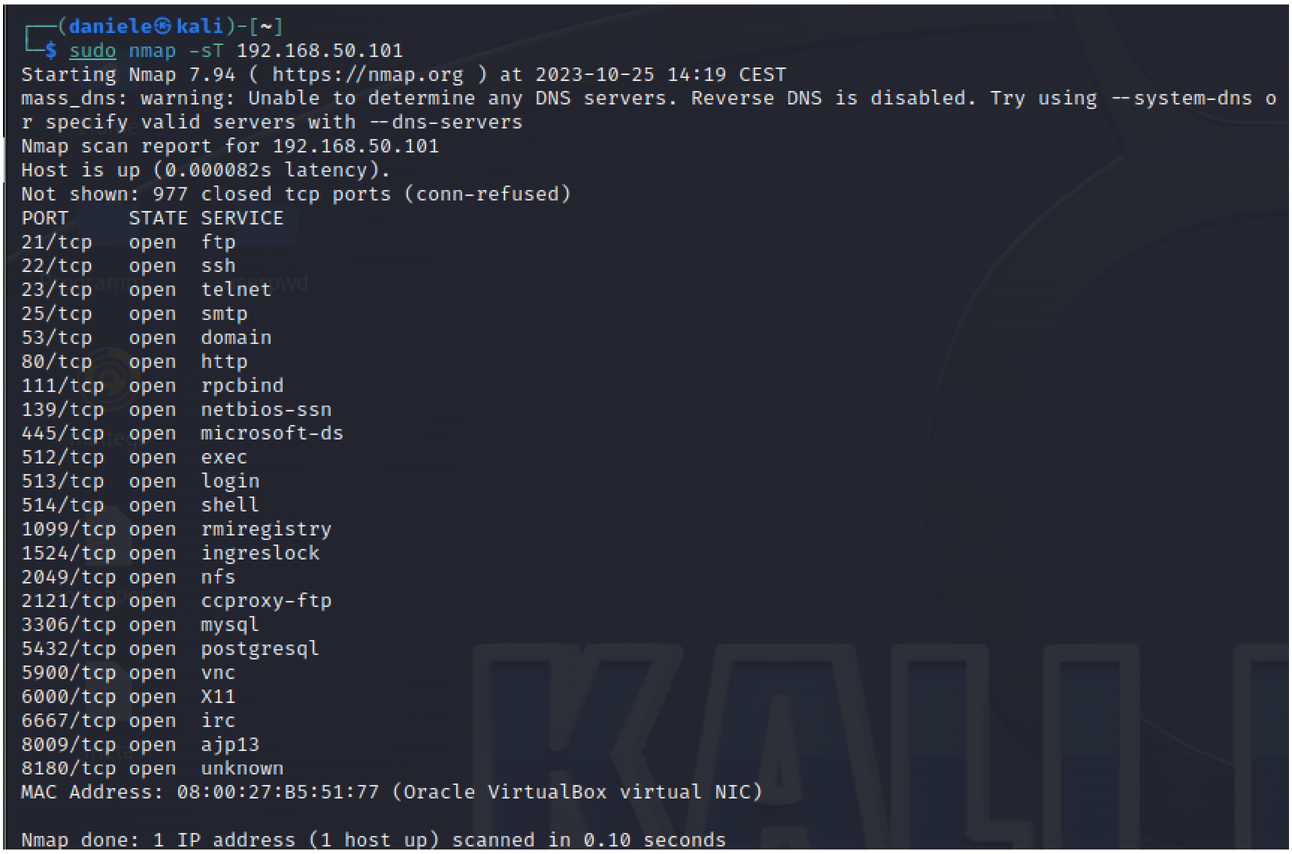
```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.101
[sudo] password for daniele:
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:17 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try u
sing --system-dns or specify valid servers with --dns-servers
Nmap scan report for 192.168.50.101
Host is up (0.00021s 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:B5:51:77 (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 1.52 seconds
```

Scansione con SYN, meno invasiva, bassa affidabilità



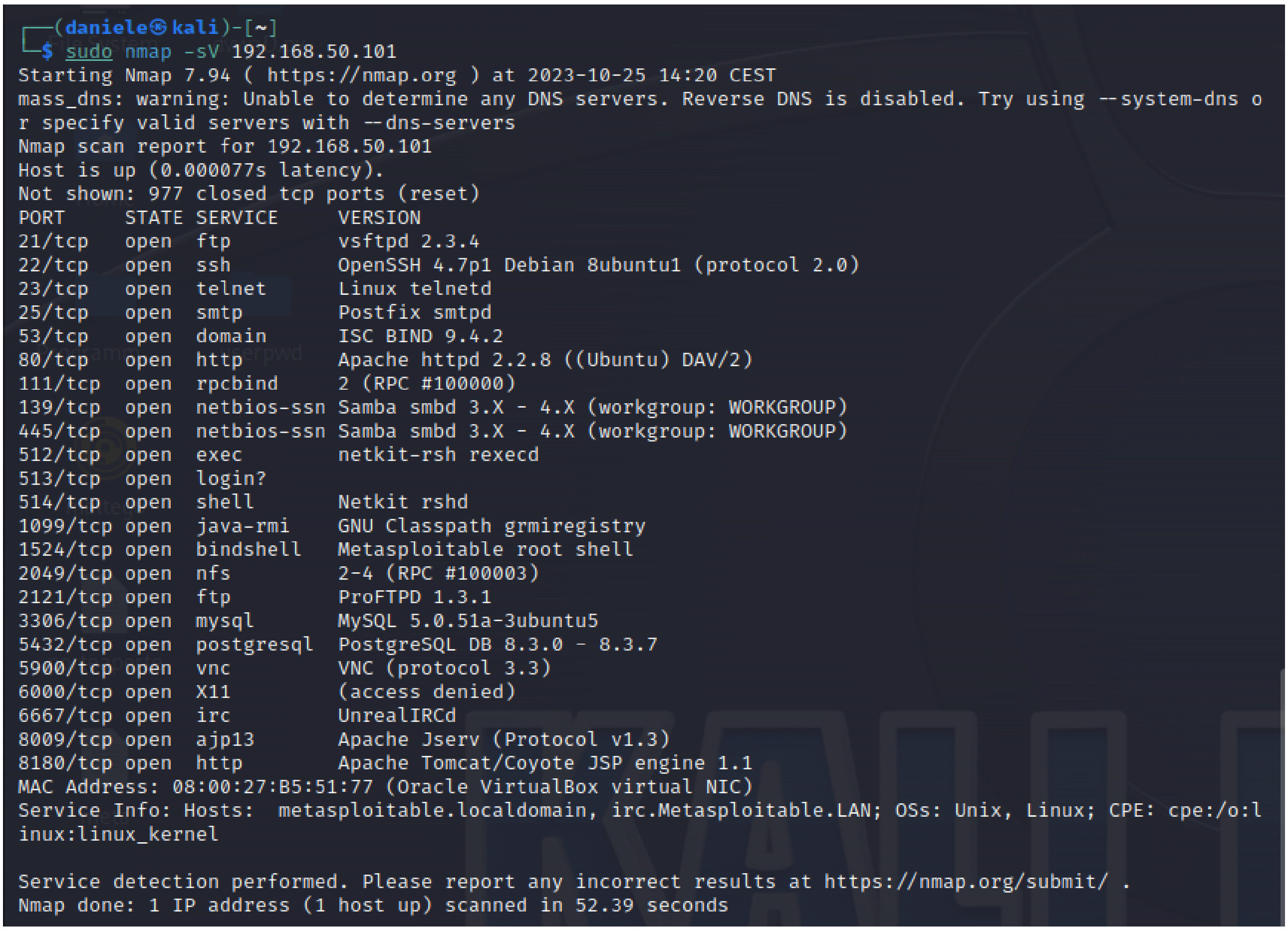
```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -sS 192.168.50.101
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:19 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.101
Host is up (0.000056s 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:B5:51:77 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.21 seconds
```

Scansione con three way handshake, molto invasiva ma molto affidabile



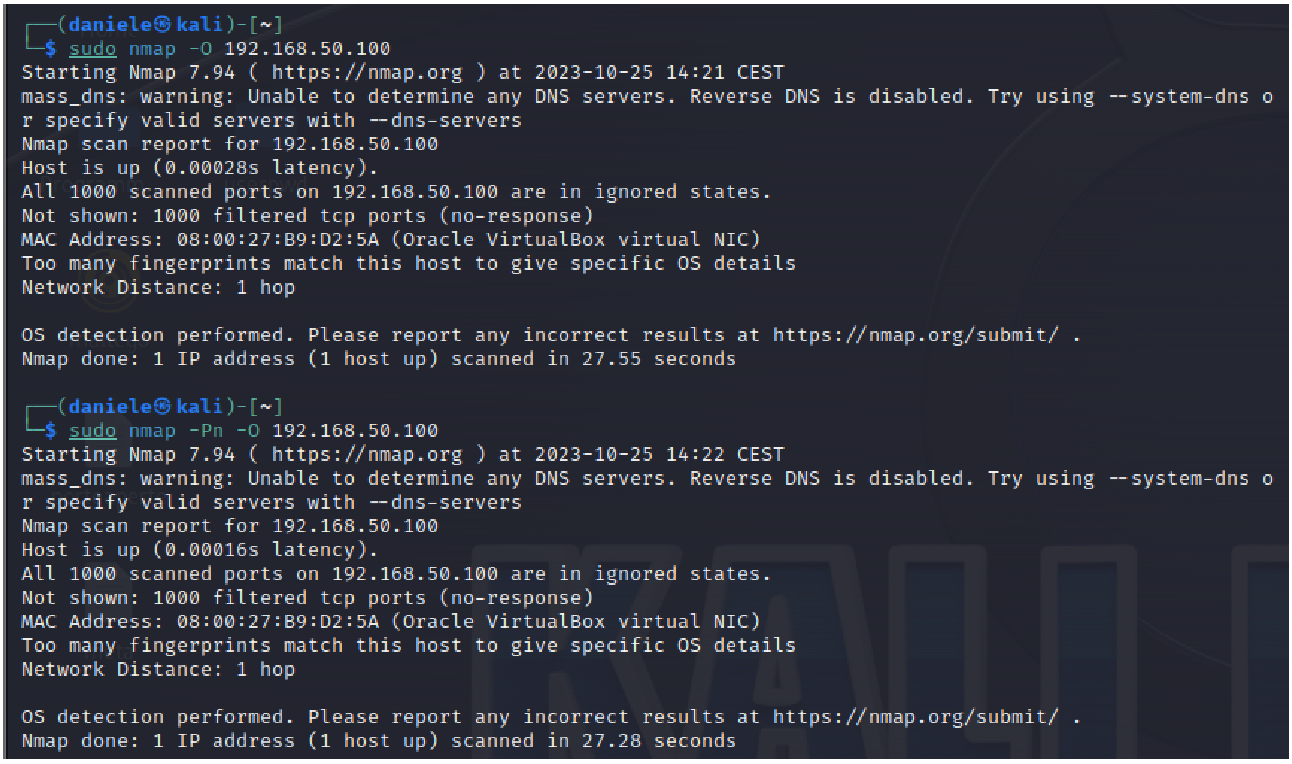
```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -sT 192.168.50.101
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:19 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.101
Host is up (0.000082s 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:B5:51:77 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
```

Comando -sV per visualizzare la versione dei vari protocolli attivi



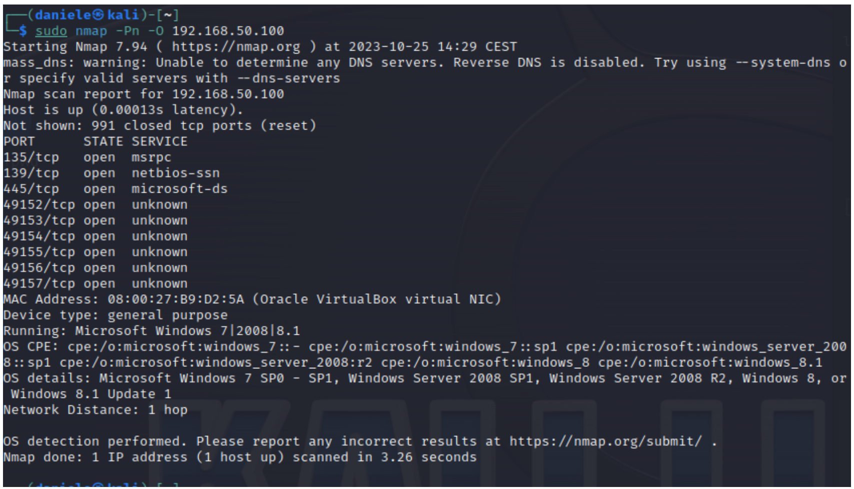
```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -sV 192.168.50.101
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:20 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.101
Host is up (0.000077s 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:B5:51:77 (Oracle VirtualBox virtual NIC)
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:l
inux: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 52.39 seconds
```

OS fingerprint verso windows, con e senza ping. Il firewall di windows 7 blocca le richieste, pertanto non abbiamo alcun risultato. Provando con -T0, comunque non riceviamo risposta.

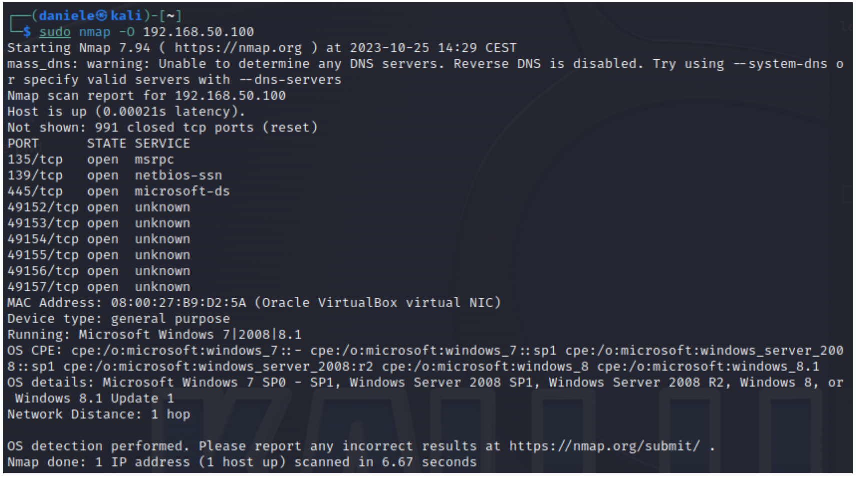


```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.100
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:21 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.100
Host is up (0.00028s latency).
All 1000 scanned ports on 192.168.50.100 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:B9:D2:5A (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 27.55 seconds

┌──(daniele㉿kali)-[~]
└─$ sudo nmap -Pn -O 192.168.50.100
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:22 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.100
Host is up (0.00016s latency).
All 1000 scanned ports on 192.168.50.100 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:B9:D2:5A (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 27.28 seconds
```

Disabilitando il firewall, invece, riceviamo risposta.

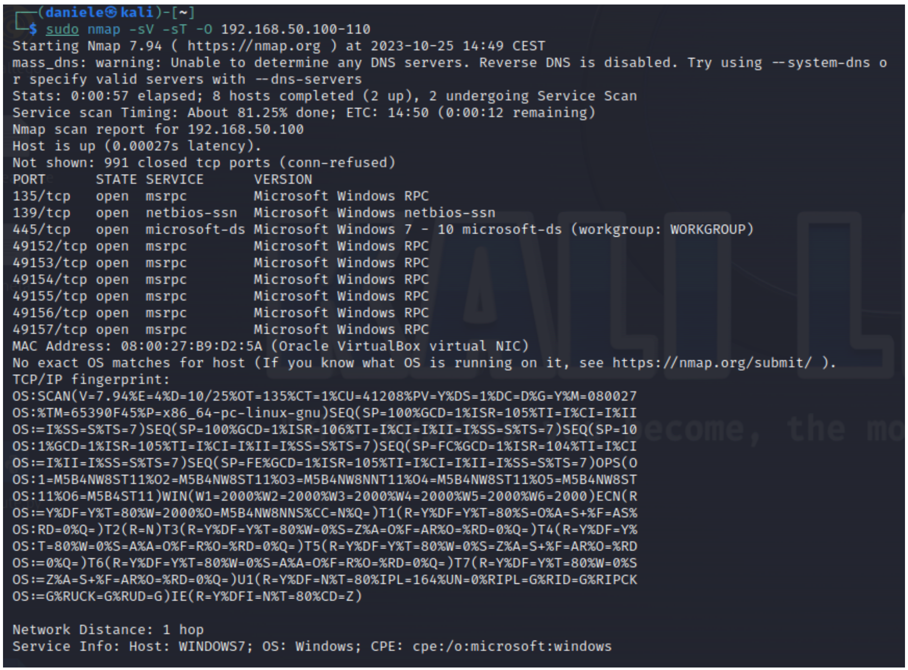


```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -Pn -O 192.168.50.100
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:29 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.100
Host is up (0.00013s 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:B9:D2:5A (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_200
8::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 3.26 seconds
```

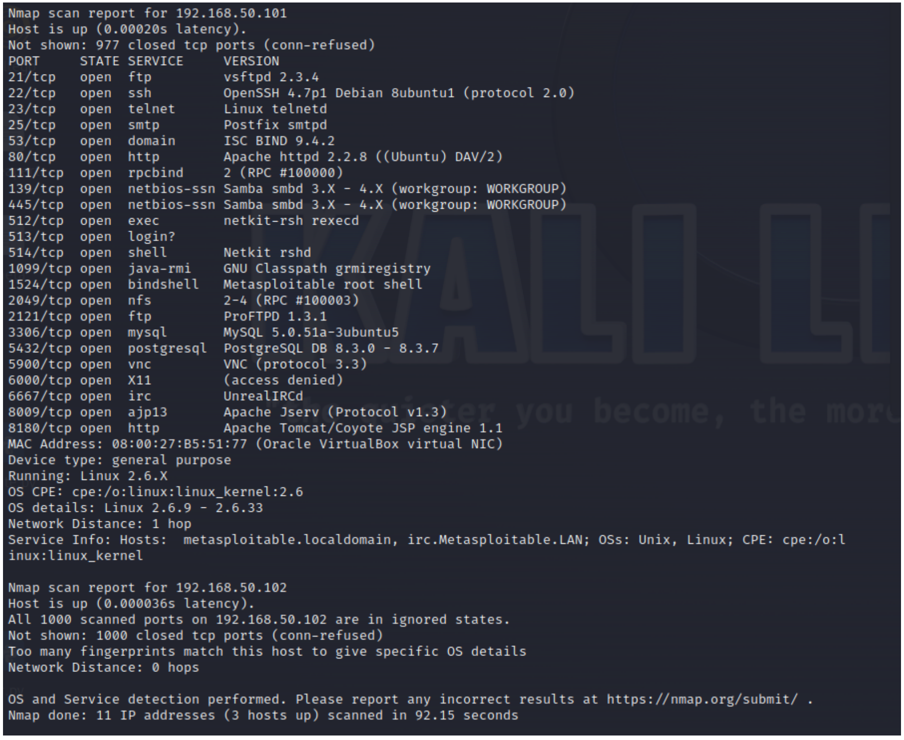


```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.100
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:29 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Nmap scan report for 192.168.50.100
Host is up (0.00021s 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:B9:D2:5A (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_200
8::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 6.67 seconds
```

Con i seguenti comandi, invece, facciamo una scansione sulle versioni dei protocolli usati, 3 ways hand shake e os fingerprint, sul range di ip da 50.100 a 50.110



```
┌──(daniele㉿kali)-[~]
└─$ sudo nmap -sV -sT -O 192.168.50.100-110
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-25 14:49 CEST
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns o
r specify valid servers with --dns-servers
Stats: 0:00:57 elapsed; 8 hosts completed (2 up), 2 undergoing Service Scan
Service scan Timing: About 81.25% done; ETC: 14:50 (0:00:12 remaining)
Nmap scan report for 192.168.50.100
Host is up (0.00027s 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:B9:D2:5A (Oracle VirtualBox virtual NIC)
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=7.94%E=4%D=10/25%OT=135%CT=1%CU=41208%PV=Y%DS=1%DC=D%G=Y%M=080027
OS:%TM=65390F45%P=x86_64-pc-linux-gnu)SEQ(SP=100%GCD=1%ISR=105%TI=I%CI=I%II
OS:=I%SS=S%TS=7)SEQ(SP=100%GCD=1%ISR=106%TI=I%CI=I%II=I%SS=S%TS=7)SEQ(SP=10
OS:1%GCD=1%ISR=105%TI=I%CI=I%II=I%SS=S%TS=7)SEQ(SP=FC%GCD=1%ISR=104%TI=I%CI
OS:=I%II=I%SS=S%TS=7)SEQ(SP=FE%GCD=1%ISR=105%TI=I%CI=I%II=I%SS=S%TS=7)OPS(O
OS:1=M5B4NW8ST11%O2=M5B4NW8ST11%O3=M5B4NW8NNT11%O4=M5B4NW8ST11%O5=M5B4NW8ST
OS:11%O6=M5B4ST11)WIN(W1=2000%W2=2000%W3=2000%W4=2000%W5=2000%W6=2000)ECN(R
OS:=Y%DF=Y%T=80%W=2000%O=M5B4NW8NNS%CC=N%Q=)T1(R=Y%DF=Y%T=80%S=O%A=S+%F=AS%
OS:RD=0%Q=)T2(R=N)T3(R=Y%DF=Y%T=80%W=0%S=Z%A=O%F=AR%O=%RD=0%Q=)T4(R=Y%DF=Y%
OS:T=80%W=0%S=A%A=O%F=R%O=%RD=0%Q=)T5(R=Y%DF=Y%T=80%W=0%S=Z%A=S+%F=AR%O=%RD
OS:=0%Q=)T6(R=Y%DF=Y%T=80%W=0%S=A%A=O%F=R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=80%W=0%S
OS:=Z%A=S+%F=AR%O=%RD=0%Q=)U1(R=Y%DF=N%T=80%IPL=164%UN=0%RIPL=G%RID=G%RIPCK
OS:=G%RUCK=G%RUD=G)IE(R=Y%DFI=N%T=80%CD=Z)

Network Distance: 1 hop
Service Info: Host: WINDOWS7; OS: Windows; CPE: cpe:/o:microsoft:windows
```



```
Nmap scan report for 192.168.50.101
Host is up (0.00020s latency).
Not shown: 977 closed tcp ports (conn-refused)
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:B5:51:77 (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
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:l
inux:linux_kernel

Nmap scan report for 192.168.50.102
Host is up (0.000036s latency).
All 1000 scanned ports on 192.168.50.102 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 11 IP addresses (3 hosts up) scanned in 92.15 seconds
```

Possiamo notare che anche kali, con firewall attivo, non risponde a tali richieste