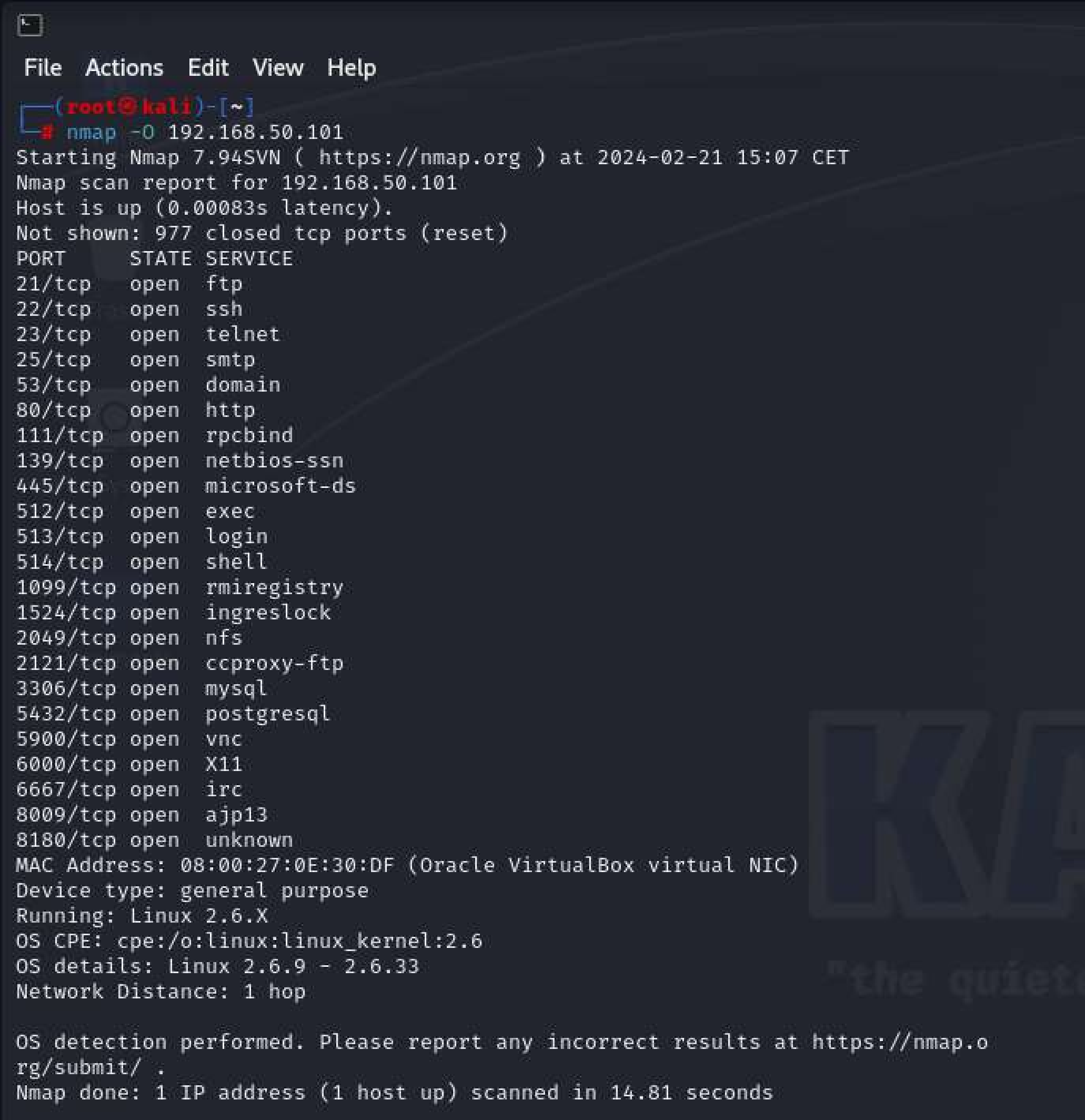
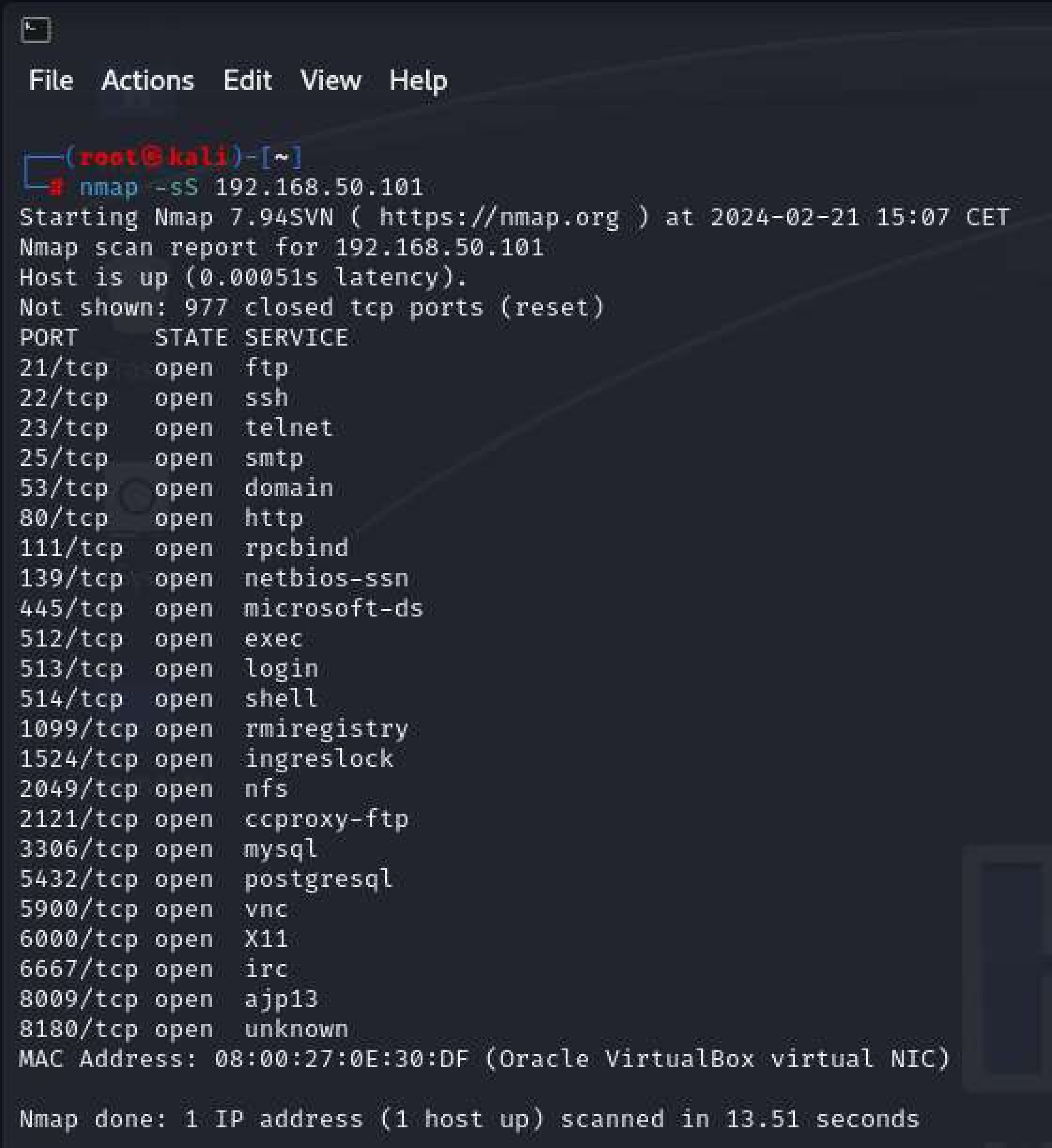


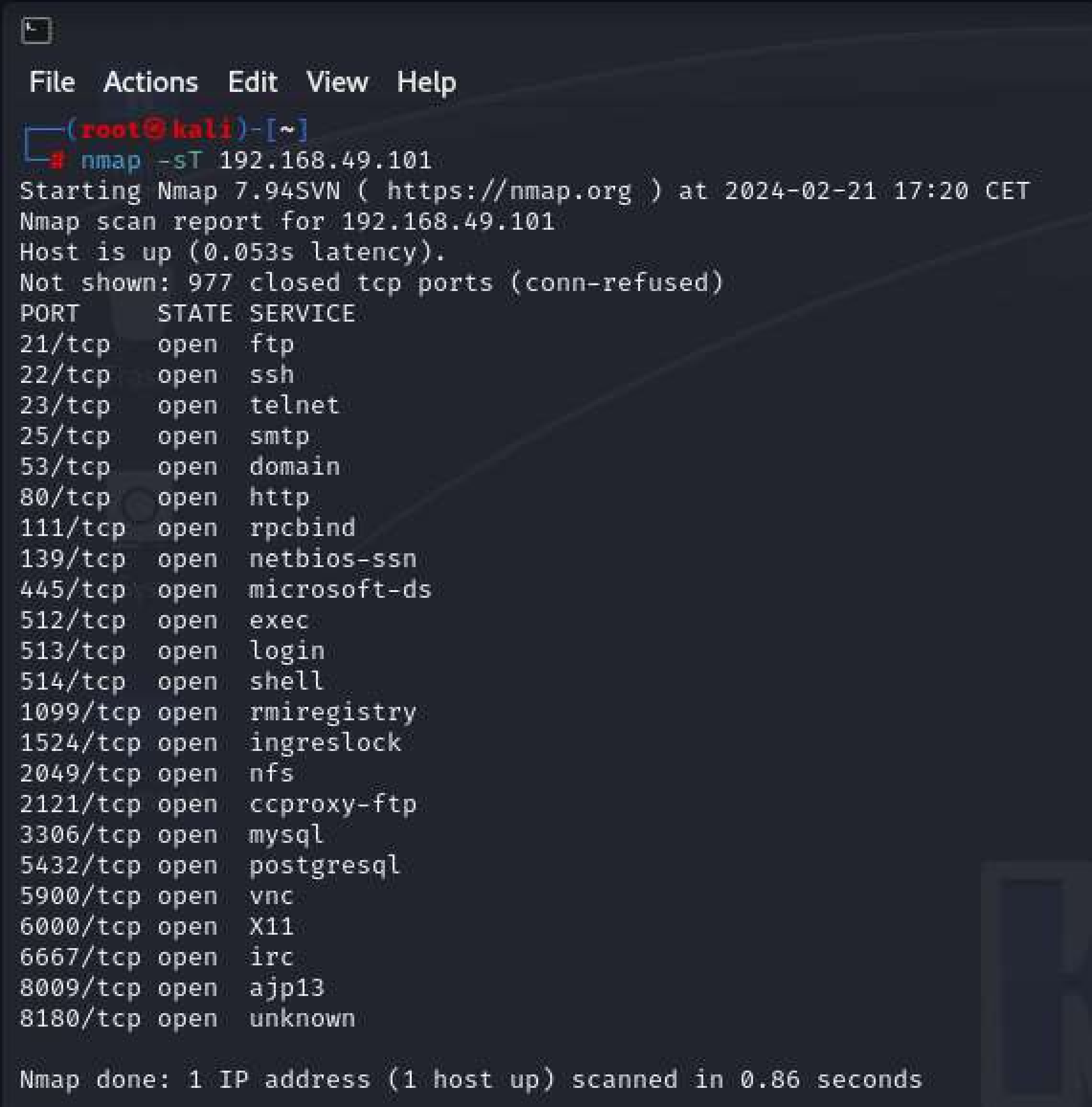
```
┌──(root㉿kali)-[~]
└─# nmap -O 192.168.50.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:07 CET
Nmap scan report for 192.168.50.101
Host is up (0.00083s latency).
Not shown: 977 closed tcp ports (reset)
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   open  ssh
23/tcp   open  telnet
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: 08:00:27:0E:30:DF (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.o
rg/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 14.81 seconds
```



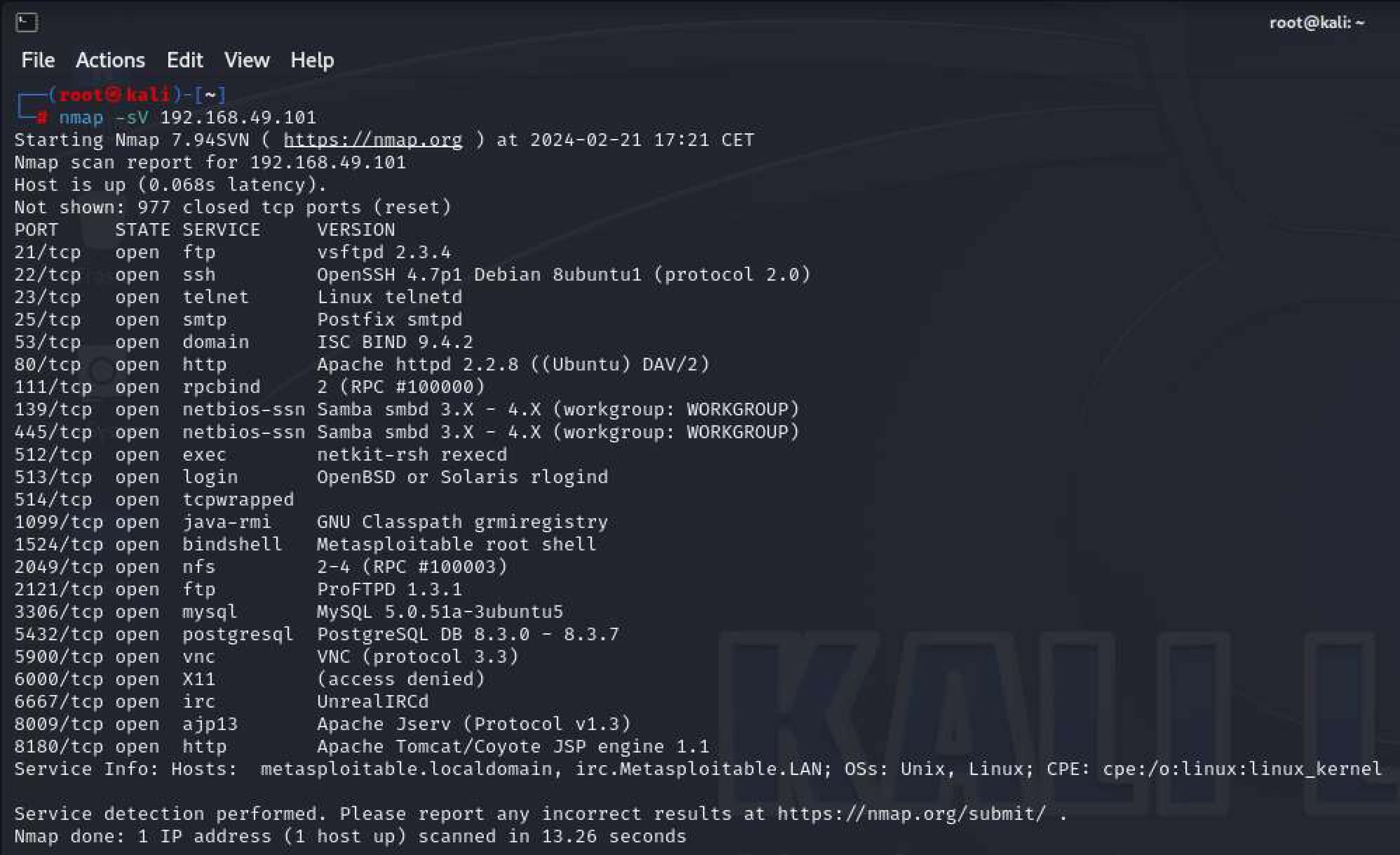
```
┌──(root㉿kali)-[~]
└─# nmap -sS 192.168.50.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 15:07 CET
Nmap scan report for 192.168.50.101
Host is up (0.00051s latency).
Not shown: 977 closed tcp ports (reset)
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   open  ssh
23/tcp   open  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: 08:00:27:0E:30:DF (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 13.51 seconds
```



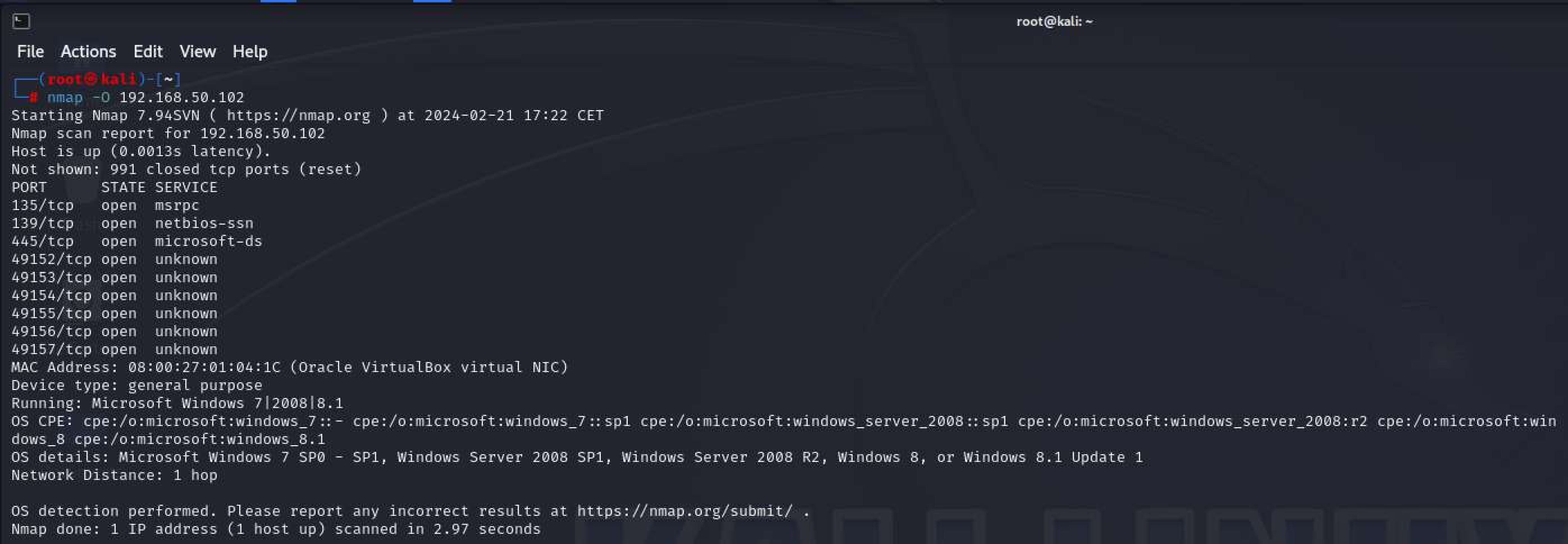
```
┌──(root㉿kali)-[~]
└─# nmap -sT 192.168.49.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 17:20 CET
Nmap scan report for 192.168.49.101
Host is up (0.053s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   open  ssh
23/tcp   open  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

Nmap done: 1 IP address (1 host up) scanned in 0.86 seconds
```



```
┌──(root㉿kali)-[~]
└─# nmap -sV 192.168.49.101
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 17:21 CET
Nmap scan report for 192.168.49.101
Host is up (0.068s 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       OpenBSD or Solaris rlogind
514/tcp  open  tcpwrapped
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
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 13.26 seconds
```



```
┌──(root㉿kali)-[~]
└─# nmap -O 192.168.50.102
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-21 17:22 CET
Nmap scan report for 192.168.50.102
Host is up (0.0013s 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: 08:00:27:01:04:1C (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: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 2.97 seconds
```

Febbraio 2024

CYBER SECURITY SPECIALIST

S5L3

Jacopo Trovato

Scansione dei servizi con Nmap

La prima scansione è stata effettuata sull'indirizzo IP di **Metasploitable**, ovvero 192.168.49.101.

- OS fingerprint: sono stato mostrate 23 porte aperte, l'indirizzo MAC del dispositivo, i dettagli OS e OS CPE;
- Syn Scan: vengono mostrate sempre le 23 porte aperte con l'indirizzo MAC;
- TCP connect: a differenza del Syn Scan non viene mostrato l'indirizzo MAC ma solo le porte aperte;
- Version detection: questa scansione permette di vedere la informazioni sull'host.

Il target seguente è stato Windows 7 sul quale è stata effettuata solo una scansione:

- OS fingerprint: come nella scansione eseguita su Meta vengono mostrate le porte aperte, in questo caso solo 9, viene mostrato il MAC adress, il tipo di device, OS CPE e i dettagli OS che in questo caso risultano di Windows.

Spiegazione Windows

La ragione per cui su Windows permette la scansione senza difficoltà è perchè non è inserito nessun Firewall, con un Firewall accesso che protegge il programma la scansione non potrà venir effettuata