Metasploitable 2 Activity and Quiz

1. Which company created Metasploit and Metasploitable 2?

The company created Metasploit and Metasploitable 2 is 'Rapid7.'

2. How many TCP ports are OPEN on MS2? (Use the -ST flag in Nmap).

Use the command 'sudo nmap -sT 10.0.2.4'. The -sT flag is used to specify a TCP (Transmission Control Protocol) scan. There will be 23 TCP ports displayed on the screen.

```
(nitin⊕kali)-[~]
 -$ <u>sudo</u> nmap -sT 10.0.2.4
Starting Nmap 7.94 ( https://nmap.org ) at 2023-09-01 15:52 IST
Nmap scan report for 10.0.2.4
Host is up (0.00014s 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:A5:E3:9D (Oracle VirtualBox virtual NIC)
```

3. How many UDP ports are OPEN on MS2? (Use the -SU flag in Nmap - this may take a while).

Use the command 'sudo nmap -sU 10.0.2.4'. The -sU flag is used to specify a UDP (User Datagram Protocol) scan. There will be a total of 7 UDP ports displayed on the screen but only 4 are open.

```
-(nitin⊕kali)-[~]
sudo nmap -sU 10.0.2.4
Starting Nmap 7.94 ( https://nmap.org ) at 2023-09-01 16:04 IST
Nmap scan report for 10.0.2.4
Host is up (0.00062s latency).
Not shown: 993 closed udp ports (port-unreach)
PORT
        STATE
                      SERVICE
53/udp
        open
                      domain
68/udp
        open|filtered dhcpc
69/udp open filtered tftp
111/udp open
                      rpcbind
137/udp open
                     netbios-ns
138/udp open|filtered netbios-dgm
2049/udp open
                     nfs
MAC Address: 08:00:27:A5:E3:9D (Oracle VirtualBox virtual NIC)
Nmap done: 1 IP address (1 host up) scanned in 1038.68 seconds
```

4. What port is running a Metasploitable Root Shell? (Use the -SV flag in Nmap).

Use the command 'sudo nmap -sV 10.0.2.4'. The -sV flag probe open port to determine service/version information. It will display the port on which the Metasploitable Root Shell is running i.e.1524

```
—(nitin⊕kali)-[~]
 s sudo nmap -sV 10.0.2.4
Starting Nmap 7.94 ( https://nmap.org ) at 2023-09-01 15:57 IST
Nmap scan report for 10.0.2.4
Host is up (0.00035s 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 exec netkit-rsh rexecd
512/tcp open exec netkit-rsh rexecd
513/tcp open login OpenBSD or Solari
                                        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
MAC Address: 08:00:27:A5:E3:9D (Oracle VirtualBox virtual NIC)
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN;
Service detection performed. Please report any incorrect results at https:
Nmap done: 1 IP address (1 host up) scanned in 11.93 seconds
```

Use the command 'sudo nmap -sT 10.0.2.4'. The -sT flag is used to specify a TCP (Transmission Control Protocol) scan. With help of this command, it is observed that there is another FTP running called ccproxy-ftp on port 2121.

```
(nitin⊕kali)-[~]
 -$ <u>sudo</u> nmap -sT 10.0.2.4
Starting Nmap 7.94 (https://nmap.org) at 2023-09-01 15:59 IST
Nmap scan report for 10.0.2.4
Host is up (0.00013s latency).
Not shown: 977 closed tcp ports (conn-refused)
       STATE SERVICE
PORT
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:A5:E3:9D (Oracle VirtualBox virtual NIC)
Nmap done: 1 IP address (1 host up) scanned in 0.28 seconds
```

Use the command 'sudo nmap -sV 10.0.2.4'. The -sV flag probe open port to determine service/version information. The version of FTP is running on the non-standard port 1.3.1.

```
–(nitin⊕kali)-[~]
└$ <u>sudo</u> nmap -sV 10.0.2.4
Starting Nmap 7.94 (https://nmap.org) at 2023-09-01 16:01 IST
Nmap scan report for 10.0.2.4
Host is up (0.000064s latency).
Not shown: 977 closed tcp ports (reset)
        STATE SERVICE VERSION
PORT
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.
111/tcp open rpcbind 2 (RPC #100000)
                            Apache httpd 2.2.8 ((Ubuntu) DAV/2)
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
8180/tcp open http
                             Apache Jserv (Protocol v1.3)
                             Apache Tomcat/Coyote JSP engine 1.1
MAC Address: 08:00:27:A5:E3:9D (Oracle VirtualBox virtual NIC)
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN
Service detection performed. Please report any incorrect results at http
Nmap done: 1 IP address (1 host up) scanned in 12.23 seconds
```