

Metasploitable 2 Activity and Quiz

First that all we need to make sure we have connection to our metasploitable2 machine from our kali linux machine. This can be done by the command `ping [ip-address]`

```
(kali㉿kali)-[~]
$ ping 10.0.3.6
PING 10.0.3.6 (10.0.3.6) 56(84) bytes of data.
64 bytes from 10.0.3.6: icmp_seq=1 ttl=64 time=0.438 ms
64 bytes from 10.0.3.6: icmp_seq=2 ttl=64 time=0.243 ms
64 bytes from 10.0.3.6: icmp_seq=3 ttl=64 time=0.246 ms
64 bytes from 10.0.3.6: icmp_seq=4 ttl=64 time=0.258 ms
64 bytes from 10.0.3.6: icmp_seq=5 ttl=64 time=0.304 ms
64 bytes from 10.0.3.6: icmp_seq=6 ttl=64 time=0.230 ms
64 bytes from 10.0.3.6: icmp_seq=7 ttl=64 time=0.242 ms
64 bytes from 10.0.3.6: icmp_seq=8 ttl=64 time=0.225 ms
^C
— 10.0.3.6 ping statistics —
8 packets transmitted, 8 received, 0% packet loss, time 7164ms
rtt min/avg/max/mdev = 0.225/0.273/0.438/0.066 ms
```

1. Which company created Metasploit and Metasploitable 2? **Answer Rapid 7**
2. How many TCP ports are OPEN on MS2? (Use the -sT flag in Nmap). **Answer is 23**

To get this we need to use this command `nmap -sT [target ip-address]`

```
(kali㉿kali)-[~]
$ nmap -sT 10.0.3.6
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-07 08:32 EDT
Nmap scan report for 10.0.3.6
Host is up (0.00076s 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:B6:8B:72 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
```

3. How many UDP ports are OPEN on MS2? (Use the -sU flag in Nmap – this may take a while). **Answer 4**

To get this we need to use this command **nmap -sU [target ip-address]**

```
(kali㉿kali)-[~]
$ nmap -sU 10.0.3.6
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-07 08:52 EDT
Nmap scan report for 10.0.3.6
Host is up (0.00026s latency).
Not shown: 952 closed udp ports (port-unreach), 44 open|filtered udp ports (no-response)
PORT      STATE SERVICE
53/udp    open  domain
111/udp   open  rpcbind
137/udp   open  netbios-ns
2049/udp  open  nfs
MAC Address: 08:00:27:B6:8B:72 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
Nmap done: 1 IP address (1 host up) scanned in 1023.93 seconds
```

4. What port is running a Metasploitable Root Shell? (Use the -sV flag in Nmap) **Answer 1524**

To get this we use the command **-nmap -sV [target ip-address]**

```
(kali㉿kali)-[~]
$ nmap -sV 10.0.3.6
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-07 08:56 EDT
Nmap scan report for 10.0.3.6
Host is up (0.00014s 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 rshcd
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
MAC Address: 08:00:27:B6:8B:72 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
```

5. What non-standard port is FTP running on? (NOT p21) (Use the -sT flag in Nmap)

answer 2121

Use the `nmap -sT [target ip-address]`

```
(kali@kali)-[~]
$ nmap -sT 10.0.3.6
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-07 09:04 EDT
Nmap scan report for 10.0.3.6
Host is up (0.013s 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
```

6. What version of FTP is running on the non-standard port? (Use the -sV flag in Nmap)

1.3.1

To get this we use the command `-nmap -sV [target ip-address]`

```
(kali@kali)-[~]
$ nmap -sV 10.0.3.6
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-07 08:56 EDT
Nmap scan report for 10.0.3.6
Host is up (0.00014s 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 rshcd
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
MAC Address: 08:00:27:B6:8B:72 (PCS-Systemtechnik/Oracle VirtualBox virtual NIC)
```