Scanning With Metasploit

Start up metasploit by using the msfconsole command, and use the search portscan command as shown below to search for port scanning modules:

```
root@kali:~# msfconsole
      --=[ 2049 exploits - 1108 auxiliary - 344 post
--=[ 562 payloads - 45 encoders - 10 nops
      --=[ 7 evasion
Metasploit tip: Use the resource command to run commands from a file
msf5 > search portscan
Matching Modules
   # Name
                                                                                           Check Description
                                                               Disclosure Date Rank
   0 auxiliary/scanner/http/wordpress_pingback_access
                                                                                                   Wordpress Pingback Locator
                                                                                                   NAT-PMP External Port Scanner
      auxiliary/scanner/natpmp/natpmp_portscan
                                                                                  normal
     auxiliary/scanner/portscan/ack
auxiliary/scanner/portscan/ftpbounce
                                                                                                   TCP ACK Firewall Scanner
                                                                                  normal
                                                                                           No
                                                                                                   FTP Bounce Port Scanner
                                                                                  normal
                                                                                           No
     auxiliary/scanner/portscan/syn
                                                                                                   TCP SYN Port Scanner
                                                                                  normal
     auxiliary/scanner/portscan/tcp
                                                                                                   TCP Port Scanner
                                                                                  normal
                                                                                           No
      auxiliary/scanner/portscan/xmas
auxiliary/scanner/sap/sap_router_portscanner
                                                                                                   TCP "XMas" Port Scanner
                                                                                  normal
                                                                                           No
                                                                                                   SAPRouter Port Scanner
                                                                                  normal
Interact with a module by name or index, for example use 7 or use auxiliary/scanner/sap/sap_router_portscanner
<u>msf5</u> >
```

We'll use the syn module by entering this command use 4 or use auxiliary/scaner/portscan/syn. Next, we will use the options command to view the available options. In this casee we will only set the rhosts (target IP address) using the set rhosts <IP_address> command. We can also increase the port range by using the set ports 1-65535 command. Finally, we will use the run command to start the scan as shown below:

```
msf5 > use 4
msf5 auxiliary(set)
                                      er/portscan/syn) > options
Module options (auxiliary/scanner/portscan/syn):
                         Current Setting Required Description
                                                                        The number of hosts to scan per set
The delay between connections, per thread, in milliseconds
The name of the interface
     BATCHSIZE 256
     DELAY
     INTERFACE
                                                                        The name of the interface
The delay jitter factor (maximum value by which to +/- DELAY) in milliseconds.
Ports to scan (e.g. 22-25,80,110-900)
The target host(s), range CIDR identifier, or hosts file with syntax 'file:<path>'
The number of bytes to capture
     JITTER
     PORTS
                         1-10000
     RHOSTS
     SNAPLEN
     THREADS
                                                                         The number of concurrent threads (max one per host)
                        500
                                                                        The reply read timeout in milliseconds
     TIMEOUT
\frac{msf5}{msf5} auxiliary(scanner/portscan/syn) > set rhosts 192.168.229.133 rhosts ⇒ 192.168.229.133 \frac{msf5}{msf5} auxiliary(scanner/portscan/syn) > set ports 1-65535 ports ⇒ 1-65535
msf5 auxiliary(
[+] TCP OPEN 192.168.229.133:22

[+] TCP OPEN 192.168.229.133:80

[+] TCP OPEN 192.168.229.133:111

[+] TCP OPEN 192.168.229.133:139
        TCP OPEN 192.168.229.133:443
```

We could also increase the scanning speed by using the set threads <number> command.