|         | Target Specification  |  |                      |                                   |
|---------|-----------------------|--|----------------------|-----------------------------------|
| Switch  | Example               | Description                                  |                      |                                   |
|         | nmap 192.168.1.1      | Scan a single IP                             |                      |                                   |
|         | nmap 192.168.1.1      |  |                      |                                   |
|         | 192.168.2.1           | Scan specific IPs                            |                      | Nman                              |
|         | nmap 192.168.1.1-254  | Scan a range                                 |                      | Nmap                              |
|         | nmap scanme.nmap.org  | Scan a domain                                | Academy              | Cheat Sheet                       |
|         | nmap 192.168.1.0/24   | Scan using CIDR notation                     |                      | 30 Days Hacking Challenge         |
| -iL     | nmap -iL targets.txt  | Scan targets from a file                     |                      | Irfan Shakeel<br>www.ehacking.net |
| -iR     | nmap -iR 100          | Scan 100 random hosts                        |                      |                                   |
| exclude | nmapexclude 192.168.1 | nmapexclude 192.168.1.1 Exclude listed hosts |                      |                                   |
|         |                       | Scan Techniques                              |                      |                                   |
| Switch  | Example               |  | Description          |                                   |
| -sS     | nmap 19               | nmap 192.168.1.1 -sS                         |                      | Default)                          |
| -sT     | nmap 19.              | nmap 192.168.1.1 -sT                         |                      | an                                |
|         |                       |  | (Default without roo | t privilege)                      |
| -sU     | nmap 192.168.1.1 -sU  |  | UDP port scan        |                                   |
| -sA     | nmap 19               | nmap 192.168.1.1 -sA                         |                      |                                   |
| -sW     | nmap 192.168.1.1 -sW  |  | TCP Window port sca  | an                                |
|         |                       |  |                      |                                   |

TCP Maimon port scan

nmap 192.168.1.1 -sM

-sM

| Host Discovery                 |   |  |  |  |
|--------------------------------|---|--|--|--|
| Example                        | Description                                     |  |  |  |
| nmap 192.168.1.1-3 -sL         | No Scan. List targets only                      |  |  |  |
| nmap 192.168.1.1/24 -sn        | Disable port scanning                           |  |  |  |
| nmap 192.168.1.1-5 -Pn         | Disable host discovery. Port scan only          |  |  |  |
| nmap 192.168.1.1-5 -PS22-25,80 | TCP SYN discovery on port x. Port 80 by default |  |  |  |
| nmap 192.168.1.1-5 -PA22-25,80 | TCP ACK discovery on port x. Port 80 by default |  |  |  |
| nmap 192.168.1.1-5 -PU53       | UDP discovery on port x. Port 40125 by default  |  |  |  |
| nmap 192.168.1.1-1/24 -PR      | ARP discovery on local network                  |  |  |  |
| nmap 192.168.1.1 -n            | Never do DNS resolution                         |  |  |  |

|                               | Port Specification                  |  |
|-------------------------------|-------------------------------------|--|
| Switch                        | Example                             | Description                                      |
| -p                            | nmap 192.168.1.1 -p 21              | Port scan for port x                             |
| -p nmap 192.168.1.1 -p 21-100 |                                     | Port range                                       |
|                               |                                     |  |
| -p                            | nmap 192.168.1.1 -p U:53,T:21-25,80 | Port scan multiple TCP and UDP ports             |
| -p-                           | nmap 192.168.1.1 -p-                | Port scan all ports                              |
| -p                            | nmap 192.168.1.1 -p http,https      | Port scan from service name                      |
| -F                            | nmap 192.168.1.1 -F                 | Fast port scan (100 ports)                       |
| top-ports                     | nmap 192.168.1.1top-ports 2000      | Port scan the top x ports                        |
|                               |                                     | Leaving off initial port in range makes the scan |
| -p-65535                      | nmap 192.168.1.1 -p-65535           | start at port 1                                  |
|                               |                                     | Leaving off end port in range makes the scan     |
| -p0-                          | nmap 192.168.1.1 -p0-               | go through to port 65535                         |

| Service and Version Detection |   |  |  |  |  |
|-------------------------------|---|--|--|--|--|
| <u>Switch</u>                 | <u>Example</u>                          | Description  |  |  |  |
| -sV                           | nmap 192.168.1.1 -sV                    | Attempts to determine the version of the service running on port           |  |  |  |
| -sVversion-intensity          | nmap 192.168.1.1 -sVversion-intensity 8 | Intensity level 0 to 9. Higher number increases possibility of correctness |  |  |  |
| -sVversion-light              | nmap 192.168.1.1 -sVversion-light nmap  | Enable light mode. Lower possibility of correctness. Faster                |  |  |  |
| -sVversion-all                | 192.168.1.1 -sVversion-all nmap         | Enable intensity level 9. Higher possibility of correctness. Slower        |  |  |  |
| -A                            | 192.168.1.1 -A                          | Enables OS detection, version detection, script scanning, and traceroute   |  |  |  |

| Switch         | Example             |                | Description   |
|----------------|---------------------|----------------|---|
| -0             | nmap 192.168.1.1 -O | osscan-limit   | Remote OS detection using TCP/IP stack fingerprinting   |
|                |                     |                |   |
| -Oosscan-limit | nmap 192.168.1.1 -O | osscan-guess   | If at least one open and one closed TCP port are not found it will not try OS detection against host                      |
| -Oosscan-guess | nmap 192.168.1.1 -O | max-os-tries 1 | Makes Nmap guess more aggressively  |
|                |                     |                |   |
|                |                     |                | Set the maximum number x of OS detection tries against a target Enables OS detection, version detection, script scanning, |
| -Omax-os-tries | nmap 192.168.1.1 -O |                | and traceroute  |
| -A             | nmap 192.168.1.1 -A |                |   |