NMAP Project

NMAP eatures

**root@kali:** nmap -h

Nmap 7.94SVN ( https://nmap.org )

Usage: nmap [Scan Types] [Options] {target specification}

**TARGET SPECIFICATION:**

Can pass hostnames, IP addresses, networks, etc.

Ex: scanme.nmap.org, microsoft.com/24, 192.168.0.1; 10.0.0-255.1-254

-iL <inputfilename>: Input from list of hosts/networks

-iR <num hosts>: Choose random targets

--exclude <host1[,host2][,host3],...>: Exclude hosts/networks

--excludefile <exclude\_file>: Exclude list from file

**HOST DISCOVERY:**

-sL: List Scan - simply list targets to scan

-sn: Ping Scan - disable port scan

-Pn: Treat all hosts as online -- skip host discovery

-PS/PA/PU/PY[portlist]: TCP SYN/ACK, UDP or SCTP discovery to given ports

-PE/PP/PM: ICMP echo, timestamp, and netmask request discovery probes

-PO[protocol list]: IP Protocol Ping

-n/-R: Never do DNS resolution/Always resolve [default: sometimes]

--dns-servers <serv1[,serv2],...>: Specify custom DNS servers

--system-dns: Use OS's DNS resolver

--traceroute: Trace hop path to each host

**SCAN TECHNIQUES:**

-sS/sT/sA/sW/sM: TCP SYN/Connect()/ACK/Window/Maimon scans

-sU: UDP Scan

-sN/sF/sX: TCP Null, FIN, and Xmas scans

--scanflags <flags>: Customize TCP scan flags

-sI <zombie host[:probeport]>: Idle scan

-sY/sZ: SCTP INIT/COOKIE-ECHO scans

-sO: IP protocol scan

-b <FTP relay host>: FTP bounce scan

**PORT SPECIFICATION AND SCAN ORDER:**

-p <port ranges>: Only scan specified ports

Ex: -p22; -p1-65535; -p U:53,111,137,T:21-25,80,139,8080,S:9

--exclude-ports <port ranges>: Exclude the specified ports from scanning

-F: Fast mode - Scan fewer ports than the default scan

-r: Scan ports sequentially - don't randomize

--top-ports <number>: Scan <number> most common ports

--port-ratio <ratio>: Scan ports more common than <ratio>

**SERVICE/VERSION DETECTION:**

-sV: Probe open ports to determine service/version info

--version-intensity <level>: Set from 0 (light) to 9 (try all probes)

--version-light: Limit to most likely probes (intensity 2)

--version-all: Try every single probe (intensity 9)

--version-trace: Show detailed version scan activity (for debugging)

**SCRIPT SCAN:**

-sC: equivalent to --script=default

--script=<Lua scripts>: <Lua scripts> is a comma separated list of

directories, script-files or script-categories

--script-args=<n1=v1,[n2=v2,...]>: provide arguments to scripts

--script-args-file=filename: provide NSE script args in a file

--script-trace: Show all data sent and received

--script-updatedb: Update the script database.

--script-help=<Lua scripts>: Show help about scripts.

<Lua scripts> is a comma-separated list of script-files or

script-categories.

**OS DETECTION:**

-O: Enable OS detection

--osscan-limit: Limit OS detection to promising targets

--osscan-guess: Guess OS more aggressively

**TIMING AND PERFORMANCE:**

Options which take <time> are in seconds, or append 'ms' (milliseconds),

's' (seconds), 'm' (minutes), or 'h' (hours) to the value (e.g. 30m).

-T<0-5>: Set timing template (higher is faster)

--min-hostgroup/max-hostgroup <size>: Parallel host scan group sizes

--min-parallelism/max-parallelism <numprobes>: Probe parallelization

--min-rtt-timeout/max-rtt-timeout/initial-rtt-timeout <time>: Specifies

probe round trip time.

--max-retries <tries>: Caps number of port scan probe retransmissions.

--host-timeout <time>: Give up on target after this long

--scan-delay/--max-scan-delay <time>: Adjust delay between probes

--min-rate <number>: Send packets no slower than <number> per second

--max-rate <number>: Send packets no faster than <number> per second

**FIREWALL/IDS EVASION AND SPOOFING:**

-f; --mtu <val>: fragment packets (optionally w/given MTU)

-D <decoy1,decoy2[,ME],...>: Cloak a scan with decoys

-S <IP\_Address>: Spoof source address

-e <iface>: Use specified interface

-g/--source-port <portnum>: Use given port number

--proxies <url1,[url2],...>: Relay connections through HTTP/SOCKS4 proxies

--data <hex string>: Append a custom payload to sent packets

--data-string <string>: Append a custom ASCII string to sent packets

--data-length <num>: Append random data to sent packets

--ip-options <options>: Send packets with specified ip options

--ttl <val>: Set IP time-to-live field

--spoof-mac <mac address/prefix/vendor name>: Spoof your MAC address

--badsum: Send packets with a bogus TCP/UDP/SCTP checksum

**OUTPUT:**

-oN/-oX/-oS/-oG <file>: Output scan in normal, XML, s|<rIpt kIddi3,

and Grepable format, respectively, to the given filename.

-oA <basename>: Output in the three major formats at once

-v: Increase verbosity level (use -vv or more for greater effect)

-d: Increase debugging level (use -dd or more for greater effect)

--reason: Display the reason a port is in a particular state

--open: Only show open (or possibly open) ports

--packet-trace: Show all packets sent and received

--iflist: Print host interfaces and routes (for debugging)

--append-output: Append to rather than clobber specified output files

--resume <filename>: Resume an aborted scan

--noninteractive: Disable runtime interactions via keyboard

--stylesheet <path/URL>: XSL stylesheet to transform XML output to HTML

--webxml: Reference stylesheet from Nmap.Org for more portable XML

--no-stylesheet: Prevent associating of XSL stylesheet w/XML output

**MISC:**

-6: Enable IPv6 scanning

-A: Enable OS detection, version detection, script scanning, and traceroute

--datadir <dirname>: Specify custom Nmap data file location

--send-eth/--send-ip: Send using raw ethernet frames or IP packets

--privileged: Assume that the user is fully privileged

--unprivileged: Assume the user lacks raw socket privileges

-V: Print version number

-h: Print this help summary page.

**EXAMPLES:**

nmap -v -A scanme.nmap.org

nmap -v -sn 192.168.0.0/16 10.0.0.0/8

nmap -v -iR 10000 -Pn -p 80

