Different usage options

Port discovery and specification
Host discovery and specification
Vulnerability scanning
Application and service version detection
Software version detection against the ports
Firewall / IDS Spoofing

Nmap + Nessus Cheat Sheet



| Port Specification Options | | |
|----------------------------|-------------------------------------|--|
| Syntax | Example | Description |
| -P | nmap -p 23 172.16.1.1 | Port scanning port specific port |
| -P | nmap -p 23-100 172.16.1.1 | Port scanning port specific port range |
| -p | nmap -pU:110,T:23-25,443 172.16.1.1 | U-UDP,T-TCP different port types scan |
| -p- | nmap -p- 172.16.1.1 | Port scan for all ports |
| -р | nmap -smtp,https 172.16.1.1 | Port scan from specified protocols |
| -F | nmap -F 172.16.1.1 | Fast port scan for speed up |
| -P "*" | namp -p "*" ftp 172.16.1.1 | Port scan using name |
| -r | nmap -r 172.16.1.1 | Sequential port scan |

| Scanning Types | | | |
|-----------------------------------|---------------------|-----------------------|--|
| Switch/Syntax | Example | Description | |
| -sS | nmap 172.16.1.1 -sS | TCP SYN port scan | |
| -sT | nmap 172.16.1.1 -sT | TCP connect port scan | |
| -sA | nmap 172.16.1.1 -sA | TCP ACK port scan | |
| -sU | nmap 172.16.1.1 -sU | UDP port scan | |
| -Sf | nmap -Sf 172.16.1.1 | TCP FIN scan | |
| -sX | nmap -SX 172.16.1.1 | XMAS scan | |
| -Sp | nmap -Sp 172.16.1.1 | Ping scan | |
| -sU | nmap -Su 172.16.1.1 | UDP scan | |
| -sA | nmap -Sa 172.16.1.1 | TCP ACK scan | |
| -SL nmap -Sl 172.16.1.1 list scan | | | |
| Scanning Command Syntax | | | |

| Nmap Timing Options | | |
|---------------------|--|--------------------------|
| Syntax | | Description |
| nmap -T0 172.16.1.1 | | Slowest scan |
| nmap -T1 172.16.1.1 | | Tricky scan to avoid IDS |
| nmap -T2 172.16.1.1 | | Timely scan |
| nmap -T3 172.16.1.1 | | Default scan timer |
| nmap -T4 172.16.1.1 | | Aggressive scan |
| nmap -T5 172.16.1.1 | | Very aggressive scan |
| | | |

| Host /172.16.1.1 Discovery | | |
|----------------------------|-------------------------------|---------------------------------------|
| Switch/Syntax | Example | Description |
| -sL | nmap 172.16.1.1-5 -sL | List 172.16.1.1 without scanning |
| -sn | nmap 172.16.1.1/8 -sn | Disable port scanning |
| -Pn | nmap 172.16.1.1-8 -Pn | Port scans only and no host discovery |
| -PS | nmap 172.16.1.185 -PS22-25,80 | TCP SYN discovery on specified port |
| -PA | nmap 172.16.1.185 -PA22-25,80 | TCP ACK discovery on specified port |
| -PU | nmap 172.16.1.1-8 -PU53 | UDP discovery on specified port |
| -PR | nmap 172.16.1.1-1/8 -PR | ARP discovery within local network |
| -n | nmap 172.16.1.1 -n | no DNS resolution |
| | | |

| Scanning Command Syntax | | |
|--|--|--|
| nmap [scan types] [options] | {172.16.1.1 specification} | |
| Use of Nmap | Scripts NSE | |
| nmapscript= test script 172.16.1.0/24 | execute thee listed script against target IP address | |
| nmapscript-update-db | adding new scripts | |
| nmap -sV -sC | use of safe default scripts for scan | |
| nmapscript-help="Test Script" | get help for script | |

| Scan Options | | |
|-----------------------------|----------------------|--|
| Syntax | Description | |
| nmap -sP 172.16.1.1 | Ping scan only | |
| nmap -PU 172.16.1.1 | UDP ping scan | |
| nmap -PE 172.16.1.1 | ICMP echo ping | |
| nmap -PO 172.16.1.1 | IP protocol ping | |
| nmap -PR 172.16.1.1 | ARP ping | |
| nmap -Pn 172.16.1.1 | Scan without pinging | |
| nmap -traceroute 172.16.1.1 | Traceroute | |
| | | |

172.16.1.1 Specification

single IP scan

scan specific IPs

scan a range of IPs

| Version Detection | | | | |
|--------------------------|--|--|--|--|
| Switch/Syntax | Example | Description | | |
| -sV | nmap 172.16.1.1 -sV | Try to find the version of the service running on port | | |
| -sV version-intensity | nmap 172.16.1.1 -sVversion-intensity 6 | Intensity level range 0 to 9. | | |
| -sVversion-all | nmap 172.16.1.1 -sVversion-all | Set intensity level to 9 | | |
| -sVversion-light | nmap 172.16.1.1 -sVversion-light | Enable light mode | | |
| -A nmap 172.16.1.1 -A | | Enables OS detection, version detection, script scanning, and traceroute | | |
| -0 nmap 172.16.1.1 -0 | | Remote OS detection | | |
| | | | | |

| Default/normal output | nmap -oN scan.txt 172.16.1.1 |
|---|----------------------------------|
| XML | nmap -oX scanr.xml 172.16.1.1 |
| Grepable format | snmap -oG grep.txt 172.16.1.1 |
| All formats | nmap -oA 172.16.1.1 |
| Miscellaneous Commands | |
| nmap -6 | scan IPV6 targets |
| nmap -proxies proxy URL, proxy 2 URL | 1 Run in targets with proxies |
| nmap -open | Show open ports only |

Nmap output Formats

| nmap xyz.org | scan a domain |
|---------------------------------------|--|
| nmap 10.1.1.0/8 | scan using CIDR notation |
| nmap -iL scan.txt | scan 172.16.1.1s from a file |
| nmapexclude 172.16.1.1 | specified IP s exclude from scan |
| Nessus Inst | allation and Usage |
| Installation | # apt-get install nessus |
| Add administrator for the application | # nessus-adduser |
| Update components | # nessus-update-plugins |
| Start nessus | <pre># /etc/init.d/nessusd start</pre> |
| Check nessus port | <pre># netstat -luntp or # netstat -landtp</pre> |

| -0 | -0 nmap 172.16.1.1 -0 | | Remote OS detection |
|---------------------------------------|-----------------------|----------|-------------------------------------|
| | Firewall | Proofing | |
| nmap -f [172.16.1.1] | | | scan fragment packets |
| nmap -mt | cu [MTU] [172.16.1.1] | | specify MTU |
| nmap -sI [zombie] [172.16.1.1] | | | scan idle zoombie |
| nmap -source-port [port] [172.16.1.1] | | | manual source port - specify |
| nmap -data-length [size] [172.16.1.1] | | | randomly append data |
| nmap -randomize-hosts [172.16.1.1] | | | 172.16.1.1 scan order randomization |
| nmap -badsum [172.16.1.1] | | | bad checksum |
| | | | |

| Nessuscli | | |
|---------------------------------|--|--|
| nessus -h | Display help | |
| nessus -q | Run in batch mode | |
| nessuslist-policies | List policies included in .nessus configuration file | |
| nessuslist-reports | List report names included in .nessus configuration file | |
| nessus -p | List available plugins in the server | |
| nessuspolicy-name (policy name) | Specify policy to use when a scan initiate in command line | |
| nessus -T (format) | Specify output report format (html, text, nbe, nessus) | |
| nessustarget-file (file name) | Use scan targets specified in the file instead of default .nessus file | |
| nessus -x | Do not check for SSL certificates | |

| ١ | Nessus | Server Commands |
|---|---------------------------------------|---|
| | nessus-service -a (ip address) | Listens to specified IP address only |
| | nessus-service -c (Config file name) | Set to use server side configuration file instead of default configuration file |
| | nessus-service -D | Set server mode to background run |
| | nessus-service -h | List summary of nessus commands |
| | nessus-serviceipv4-only | Listen to IPV4 only |
| | nessus-serviceipv6-only | Listen to IPV6 only |
| | nessus-service -K | Configure master password for nessus scanner |
| | nessus-service -p | Set server to listen to client specified port rather than default port 1241 |
| | nessus-service -q | Run in quiet mode |

nmap 172.16.1.1

nmap 172.16.1.1 172.16.100.1

nmap 172.16.1.1-254