

## Network Scanning with NMAP and Zenmap

### Download Zenmap:

Open Chrome → Search "zenmap download" → Click on the first link → Then click on "zenmap download page" → Then click on Windows → Click "nmap-7.93-setup.exe" → Then download the file → Install Zenmap.

### Scanning with Zenmap:

- Open Zenmap application → Give the target IP "50.50.48.13" → Select the profile "Ping Scan" → Then it will show the command → `nmap -sn -v 50.50.48.13` [target IP].
- Click on Scan.

### Output:

- Host is up (0.00106 latency).
- MAC Address: D8:5E:D3:DE:0F:FE (Giga-byte Technology).
- Nmap Done: 1 IP address (1 host up) scanned in 0.42 second.

### Scan with NMAP in Kali:

Open terminal in Kali Linux,

- `#nmap -sn <target IP>` for scan (ping).
- `#nmap -Pn <target IP>` → Port scanning without host discovery.

`# nmap -Pn -v <target IP>` verbose scan.

`# nmap -Pn -ON <target IP>` (Output Generate)

`# nmap -p sS -v -oX scan.xml <target IP>`

`# nmap -p 22 <target IP>`

`# nmap -p -sS -v <target IP>`

`# nmap -A -v <target IP>` Aggressive scan.

`# nmap -T1 -A -v -f <target IP>`

`# nmap -p telnet <target IP>`

`# nmap -r <IP>` sequential port scan.

### List Scan

`# nmap <IP> -sL` view range of IP.

`# nmap <IP> -sV --version-intensity 6`

`# nmap -f <IP>`

`# nmap -mtu 64 <IP>`

`# nmap -sl <IP>` zombie scanning

`# nmap -sl 52215 <IP>`