

Aim: knowing about CyberSecurity tools.

### 1. Nmap

Nmap is short form of Network Mapper. It is an open-source Linux command-line tool that is used to scan IP addresses and ports in a network and to detect installed applications.

Nmap allows network admins to find which devices are running on their network, discover open ports and services, and detect vulnerabilities.

Nmap helps you to quickly map out a Network without sophisticated commands or configurations. It also supports simple commands and complex scripting through the Nmap scripting Engine.

We use Nmap in our kali linux Command prompt.

Let's take a command of Nmap.

### Syntax

`nmap <ipaddress>`

`nmap 192.10.0.11`

port	state	service
22/tcp	open	ssh

25/tcp

filtered

smtp

30/tcp

open

http

. . .

## Zenmap

Zenmap is the official Nmap security scanner GUI. It is a multi-platform free and open source application which aims to make Nmap easy for beginners to use while providing advanced features for experienced Nmap users.

Frequently used scans can be saved as profiles to make them easy to run repeatedly. A command creator allows interactive creation of Nmap command lines. Scan results can be saved & viewed later. Saved scan results can be compared with one another to see how they differ.

## Commands

Open zenmap and then set Target

Ip address 10.0.8.1/24

and set profile to Quick scan plus

and then click on scan it starts

scanning and then click on topology

to we can see a diagram.



We can observe the image with colors. The colour changing says they are dead hosts or live hosts and servers.

### Task Manager

Task Manager shows the services that a system performs

so to see the services open task Manager and click on services option

It shows all the services that are going in the system up to present

It gives Name, PID, Description, and The type of service it provides.

### Angry IP Scanner

It is an Open source and cross-platform network scanner designed to be fast, and simple to use. It scans IP address and ports as well as has many other features. It is widely used by network administrators and just curious users around the world, including Large and small enterprises, banks, and Govt Agencies. It runs on Linux, Windows, and MacOS X, possibly supporting other platforms as well.

Open Angry IP Scanner and set the IP range and then set IP value and click on start to start the scanning.

The Result comes below

The Balls which are Red in colour are dead and Balls of Blue are live and Balls of Green are the servers.

We can Open the services of green in google chrome to check out their Website.

for Example from IP range

14.97.0.0 to 14.97.255.255

We have many websites like

IP 14.97.1.22 has DBMS i.e., MySQL Website.

IP 14.97.0.27 is the website some spy cams etc.,

We have many of them some of them does not open so that indicates the protection of those Website by the Firewalls.



## Advanced Ip Scanner.

Advanced Ip scanner is a free network scanner that can locate and analyze all computers available on your wireless or wired local network. With its help, you can get remote Access to all pcs, such that you can copy and share files present on the shared folders and turn off systems remotely. The Application is portable and can be used by network admins anytime, any where. The primary purpose of a network scanner is to help administrators manage devices connected to a local network.

### Commands

Open Advanced Ip Scanner and then give the Ip address in the consent column and then click on Scan.

It gives all the systems internal things like the directories of the other system to access and download files.

## Global Network Inventory

It is a powerful and flexible software and hardware inventory system that can be used as an audit scanner in an agent-free and zero deployment environments. If used as an audit scanner, it only requires full administrator rights to the remote computers you can wish to scan. Global Network Inventory can audit remote computers and even network printers, document centers etc.,

Global Network Inventory agent can also be deployed to perform regular audits initiated through the domain logic script when your users log on the Network.

### Commands

Open Global Network Inventory and click the default settings.