

Exp. No: 8

10/10/25

NMAP to discover live hosts using Nmap scans on Tryhackme.

Aim:

To discover live hosts using Nmap scans on Tryhackme.

Intro:

This experiment outlines the processes that Nmap takes before port-scanning to find which systems are online. This stage is critical since attempting to port-scan offline systems will merely waste time & create unneeded network noise.

The following is the information that will be covered in an attempt to discover live hosts

- 1) ARP scan: This scan uses ARP requests to discover live hosts.
- 2) ICMP scan: This scan uses 'ICMP' requests to identify live hosts.
- 3) TCP/UDP ping scan: This scan sends packets to TCP ports and UDP ports to determine live hosts.

There will be two scanners introduced.

1. argp-scan
2. masscan.

Nmap (Network Mapper) - It is well known tool for mapping networks, locating live hosts and detecting running services. Nmap's scripting engine can be used to extend its capabilities such as

NMAP to discover live hosts using ICMP scans
On the line

To discover live hosts using TCP scans on

- 1 Enumerate target
- 2 Discover live hosts.
- 3 Reverse DNS lookup
- 4 Scan ports
- 5 Detect Versions.
- 6 Detail OS
- 7 Trace route
- 8 Scripts
- 9 Add Output.

the following is the information that will be covered in an attempt to discover live hosts. This scan uses ARP requests to discover live hosts.

2) ICMP scan: This scan uses ICMP requests to identify live hosts.

3) TCP/UDP ping scan: The scan sends probes to TCP ports and UDP ports to determine the hosts.

There will be two scanners introduced.

1. nmap
2. masscan

1) nmap (Network Mapper) - It is well known mapping network, locating live hosts and running services. It's a scripting engine. It need to extend its capabilities such as

fingerprinting services & exploiting flaws.

The scans typically follow the steps represented in the image below, but several are operational and are conditional on the "command line" options prior to the scan.

How many devices are you able to discover using ARP requests?

3

What is the option required to tell Nmap to use ICMP Timestamp to discover live hosts?

-RP

What is the option required to tell Nmap to use ICMP address Mask to discover live hosts?

-PM

What is the option required to tell Nmap to use ICMP Echo to discover live hosts?

PE

What is the type of packet that computer 1 received before being able to send the ping?

ARP Response

How many computers respond to the ping request?

1 Send a packet with the following.

* From Computer 2

* To Computer 5

* Packet Type: "Ping Request"

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