EX. NO. : 12   **Nmap to discover live hosts**
DATE: 22.09.2025

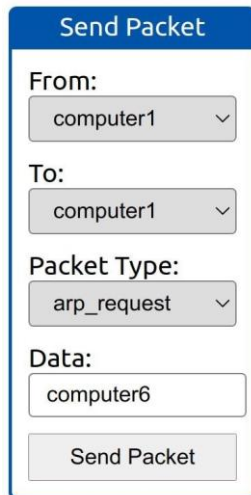**AIM:**

To use Nmap to discovery live hosts using ARP Scan ,ICMP scan , and TCP/UDP Ping Scan in the tryhackme platform.

TASK : 2 - SUBNETWORKS:

Send a packet with following

1. From computer1
2. To computer1 (to indicate it is broadcast)
3. Packet Type: " ARP Request"
4. Data : computer6 (because we are asking for computer6 MAC address using ARP Request)

How many devices can see the ARP Request?
Ans : 4

Did computer6 receive the ARP Request ? (Y / N) Ans : N
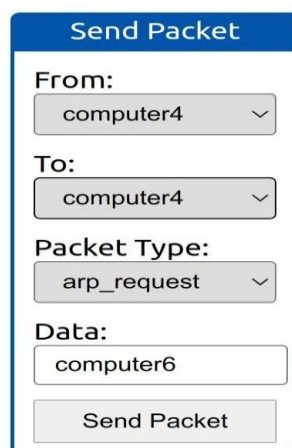Send a packet with the following:

1. From computer4
2. To computer4 (to indicate it is broadcast)
3. Packet Type: " ARP Request"
4. Data : computer6 (because we are asking for computer6 MAC address using ARP Request)

How many devices can asee the ARP Request ?
Ans : 4

Did computer6 reply to the ARP Request ? (Y / N) Ans : Y
TASK - 3 : Enumerating Targets
What is the first IP address Nmap would scan if you provided 10.10.12.13/29 as your target ?
Ans : 10.10.12.8
How many IP addresses will Nmap scan if you provide the following range
10.10.0-255.101-125 ?

Ans : 6400
TASK - 4 : Discovering Live Hosts
Send a packet with following :
1. From computer1
2. To computer3
3. Packeet Type : "Ping Request"

What is the type of packet that computer1 sent before the ping ?
Ans : ARP Resquest
How many computers responded to the ping request? Ans : 1
Send a packet with following:
1. From computer2
2. To computer5
3. Packet Type: "Ping Request"

What is the name of the first device that responded to the first ARP Request? Ans : router
What is the name of the first device that responded to the second ARP Request? Computer5
Send another Ping request.Did it required new ARP Requests? (Y / N)
Ans : N

TASK - 5 : Nmap Host Discovery Using ARP

We will be sending broadcast ARP Requests packets with the following options:

- From computer1
- To computer1 (to indicate it is broadcast)
- Packet Type: "ARP Request"
- Data: try all the possible eight devices (other than computer1) in the network: computer2, computer3, computer4, computer5, computer6, switch1, switch2, and router.

How many devices are you able to discover using ARP requests?
Ans : 3

TASK - 6 : Nmap Host Discovery Using ICMP Nmap
Host Discovery Using ICMP :
What is the option required to tell Nmap to use ICMP Timestamp to discover live hosts? Ans : -

PP

What is the option required to tell Nmap to use ICMP Address Mask to discover live hosts?
Ans : -PM

What is the option required to tell Nmap to use ICMP Echo to discover live hosts?
Ans : -PE

TASK - 7 : Nmap Host Discovery Using TCP and UDP
Which TCP ping scan does not require a privileged account? Ans : TCP SYN Ping

Which TCP ping scan requires a privileged account?
Ans : TCP ACK Ping

What option do you need to add to Nmap to run a TCP SYN ping scan on the telnet port?
Ans : -PS23

TASK - 8 : Using Reverse - DNS Lookup

We want Nmap to issue a reverse DNS lookup for all the possibles hosts on a subnet, hoping
to get some insights from the names. What option should we add? Ans : -R

RESULT :
Nmap to discover live host usng ARP scan ,ICMP scan and TCP/UDP ping scan in the
tryhackme platform.