

EXP NO : 08

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### **Nmap to discover live hosts**

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 Packet

**From:**

computer1

**To:**

computer1

**Packet Type:**

arp\_request

**Data:**

computer6

Send Packet

Send a packet with follow

ing

- 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 Packet

**From:**

**To:**

**Packet Type:**

**Data:**

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 see 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.Packet Type : “Ping Request”

What is the type of packet that computer1 sent before the ping ? Ans

: ARP Request

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 possible 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 using ARP scan, ICMP scan and TCP/UDP ping scan in the tryhackme platform.