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Assignment 6 - *Nmap Live Host Directory*

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CS298-71

**Task 2:**

Terms to remember:

*network segment*- a group of computers connected using a shared medium, network segment refers to a physical connection

*Subnetwork*- usually the equivalent of one or more network segments connected and configured to use the same router, subnetwork refers to a logical connection

Enter the Network Simulator and send a packet with the following properties:

Graphical user interface, application

Description automatically generated

Diagram

Description automatically generated

Table

Description automatically generated with low confidence

Send another packet with the following properties:

Graphical user interface, application

Description automatically generated

Table

Description automatically generated with low confidenceGraphical user interface, text, application

Description automatically generated

**Task 3: Target Specification**

**Text, application

Description automatically generated**

**Task 4:**

Send a packet with the following properties:

* From computer1
* To computer3
* Packet Type: “Ping Request”

Graphical user interface, text, application, chat or text message

Description automatically generated

Text

Description automatically generated Text, letter

Description automatically generated

Send another packet with the following properties:

* From computer2
* To computer5
* Packet Type: “Ping Request”

Text

Description automatically generated with medium confidence

**Text

Description automatically generated** **Text

Description automatically generated** Graphical user interface, text, application, chat or text message

Description automatically generated Text

Description automatically generated

**Task 5:**

Send a broadcast ARP Requests packets with the following properties:

* 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.

Graphical user interface, text, application

Description automatically generated

**Task 6:**

Graphical user interface, text, application, chat or text message

Description automatically generated

**Task 7:**

Graphical user interface, text, application, chat or text message

Description automatically generated

**Task 8:**

By default, Nmap will look for online hosts, but you can use the -r command to query DNS servers for offline hosts. If you don’t prefer to send the DNS queries, use the command -n to skip this step.

**Graphical user interface, text, application

Description automatically generated**

**Task 9: Summary**

We can now detect hosts using tools such as ARP, ICMP, TCP, and UDP. For reference, see below for command-line options for NMAP.

A picture containing graphical user interface

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

NOTE: -The -sn can be used to bypass port-scanning through the host discovery process