

7/8/20

Practical - 15

Aim

Experiments on Packet capture tool:

Packet sniffer

- sniffs messages being sent (received) from / by protocol fields in the message
- store & displays the contents of the various protocols fields in the message
- Passive Program
  - ↳ never send packets itself
  - ↳ no packets addressed to it
  - ↳ receives a copy of all packets

Packet sniffer structure diagnostic tool

\* TCP dump

→ tcpdump - exn host 10.129.41.2.1

\* Wire shark

→ wire shark - r - exe 3, out

Packet sniffer

Packet  
analyzer

Packet  
capture  
(PCAP)

Application

application (eg.  
www.browser.php  
client)

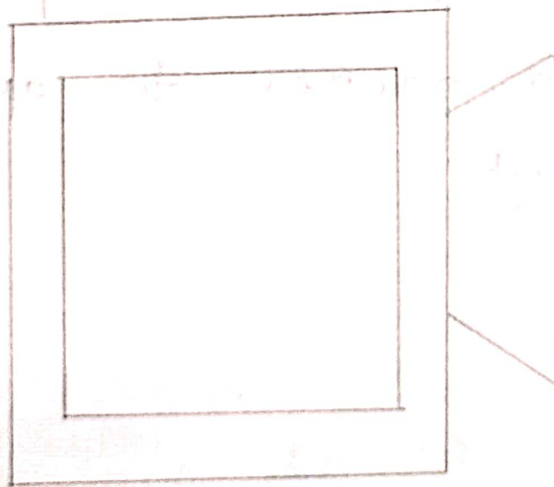
Transport  
(TCP/UDP)  
Network (IP)  
Link (Ethernet)  
Physical

operating sys.

copy of an element

frames sent  
receive

to / from  
network



to / from  
Network

## Student Observation :

- 1) It refers to setting that allows the network interface card to capture all network traffic on the segment it is connected.
- 2) It does not have a transport layer head they operate at the data link layer and are used for mapping IP address to MAC address.
- 3) Uses UDP as its transport layer protocol Port 53
- 4) HTTP Protocol uses port number 80 for communication over the web.
- 5) It is typically 1255.255.255-255 used to send a packet to all device in network segment.

## Result :

This, Wireshark tool has been experimented on packet captured and studied.

*Dev*  
28/8/21