

WEEK 17

Tool Exploration -

Wireshark OBSERVATION:

31-8-23

Aim - Tool exploration (Wireshark)

Wireshark is an open-source packet analyzer, which is used for education, analysis, software development, communication protocol development and network troubleshooting. It is used to track the packets so that each one is filtered to meet our specific needs. It is commonly called as a sniffer, network protocol analyzer, and network analyzer. It is also used by network security engineers to examine security problems. Wireshark is a free-to-use application which is used to apprehend the data back & forth.

Wireshark can be used in the following ways:

- It is used by network security engineers to examine security problems.
- It allows the users to watch all the traffic being passed over the network.
- It is used by network engineers to troubleshoot network issues.
- It also helps to troubleshoot latency issues and malicious activities on your networks.
- It can also analyse dropped packets.
- It helps us to know how all the devices, like laptop, mobile, desktop, switch, router etc communicate in a local network or the Internet.

Functionality of Wireshark:

Wireshark is similar to tcpdump in networking. Tcpdump is a common packet analyzer which allows the user to display other packets and TCP/IP packets, being transmitted & received over a network.

attached to the computer. It has a graphic card and some sorting & filtering functions. Wireshark users can see all the traffic passing through the network. Wireshark can also monitor the unicast traffic which is not sent to networks MAC address interface. But, the switch does not pass all the traffic to port. Hence, the promiscuous mode is not sufficient to see all the traffic. The various network taps or port mirroring is used to extend capture at any point. Port mirroring is a method to monitor network traffic. When it is enabled, the switch sends the copies of all the network packets present at one port to another port.

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