DIY Projects

NetworkTrafficAnalyser

Expected time to finish 7-8 Days

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Introduction

We would make a network traffic analyser, to parse and analyse the network traffic going through the targeted IPs and also track the traffic going to malicious sites known to us. This is a tool used extensively in the cybersecurity field and can be used in various cases.

You can go through this link to better understand the same: <u>Network Traffic</u>

<u>Analyser for cyber security</u>

Tech Stack

- Python
- Wireshark
- Ettercap
- MySQL

Commands

- 1. We will learn about networks in depth so as to be able to make the analyzer. You can also play around with <u>Cisco Packet Tracer</u> to get hold of the same.
- 2. Then we would proceed to learn the fundamentals of Wireshark, the tool we would use to capture the packets and get their information files.
- 3. Now Ettercap would be used to determine which packets are going where and analyse the traffic.
- 4. MySQL is used to store all the files in an encrypted form.
- 5. Once we have completed understanding the individual components we will write a python program to make the network traffic analyzer.
- 6. To build upon the project, we can also use a visualizer like google earth API to give the output.

Resources

1. Network fundamentals: <u>NetworkKing Playlist</u> (Do till you get a good idea of how networks work and how you would approach the project)

- 2. Wireshark: What Is Wireshark and How to Use It | Cybersecurity | CompTIA
- 3. MySQL: <u>SQL Tutorial Full Database Course for Beginners</u>
- 4. Ettercap: Ettercap and middle-attacks tutorial

Submission

The best projects will get featured in the next edition of **Debugged (Issue 3)**, our highly acclaimed club magazine, so don't forget to submit your projects upon completion!

After completing the project, fill out this form to submit your hard work.