VPN SpyGlass

VPN Traffic Analyzer

Introduction

VPN SpyGlass is an open-source tool that detects and categorizes VPN traffic on a network using deep packet inspection. It classifies VPN traffic by protocol or type, aiding network administrators in monitoring and managing VPN usage, identifying unauthorized connections, tracking user activity, and uncovering security risks.

Problem Statement

- The proliferation of VPNs poses a challenge to network administrators, as these tools can bypass security measures and access restricted content. This poses security risks, violates agreements, and slows network performance.
- Existing methods often struggle to identify VPN traffic due to encryption and masking techniques employed by VPN services.

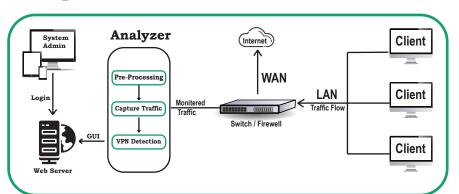
Objective

- Thorough analysis of encrypted traffic.`
- Identify Encrypted VPN traffic
- Fast VPN Application Detection.
- User Friendly VPN Analyzer
- Provide Admin Control Over Network

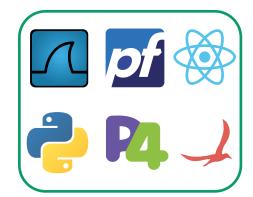
Research Methods

- Literature Review
- Environment Setup
- Signature-Based Detection
- Construct & Tuned Traffic ignatures
- Encrypted Traffic Capture & Analysis

Design / Architecture / Flow of Tool



Technologies



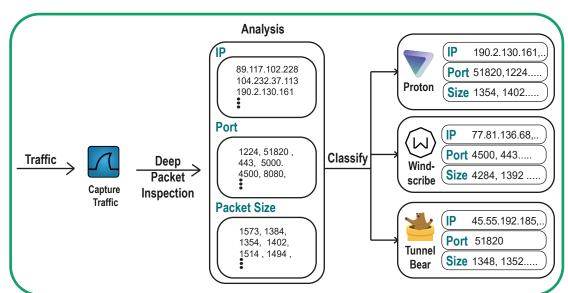
Results

After Deep Packet Inspection, we get shown:

- Identify VPN Traffic
- Identify VPN Applica-
- Identify VPN Ports and IP Addresses.

Conclusion

Compared to Traditional Methods, VPN SpyGlass provides more control to the system administrator to detect and contol use of VPN in a network.



Group Members

Hassan Abdullah Sameen Mubashar Advisor: Dr. Medhi Hussain
Co-Advisor: Dr. Arsalan Ahmad