



# AIREAGLE

NETWORK PACKET ANALYZER

TEAM:

CACA NETWORKS

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# PROBLEM STATEMENT

- We are already familiar with softwares like Wireshark for analyzing the network packets and traffic.
- But, NO such application is available for Mobile Devices.
- Hence, it is difficult for analyzing the network of mobile devices.

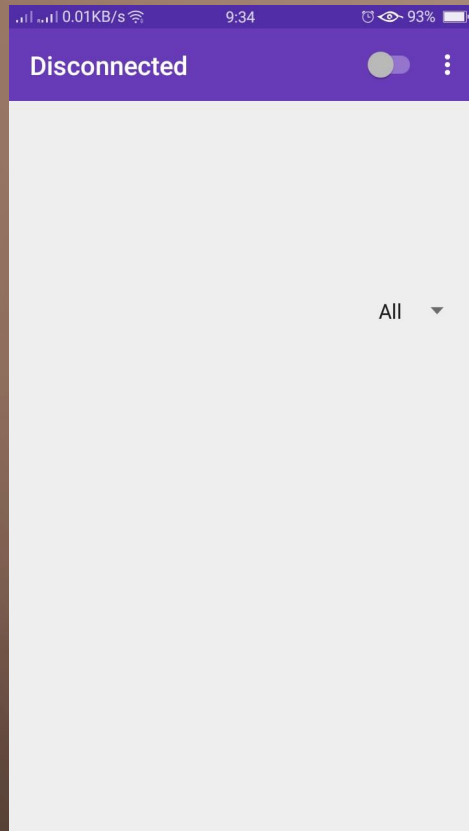
# SOLUTION – AirEagle!!!

- Android application developed for analyzing packets.
- Track TCP and UDP packets
- Identify Destination and Source IP Addresses.
- Analyze bandwidth by application, protocol and IP address groups.
- Identify and mitigate devices and applications that use excessive bandwidth.

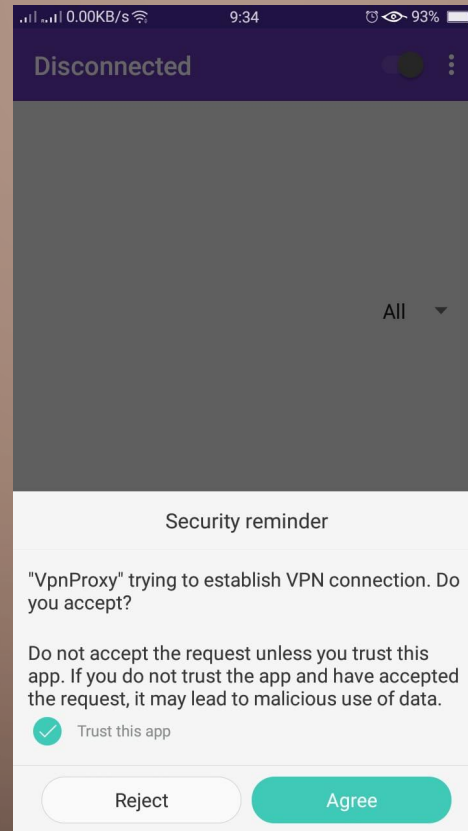
# How it works-

- We used an inbuilt service provided by android itself, VPNService API.
- Using this api, we registered a service in our app, which when activated is given a file descriptor that backs a network tunnel interface.
- This tunnel interface is then used by the whole device for all network traffic.
- Now, when any app sends some data, instead of that going out to the network, each IP packet is buffered behind our file descriptor.
- Our app then examines these bytes, and then puts them straight back on the real network.

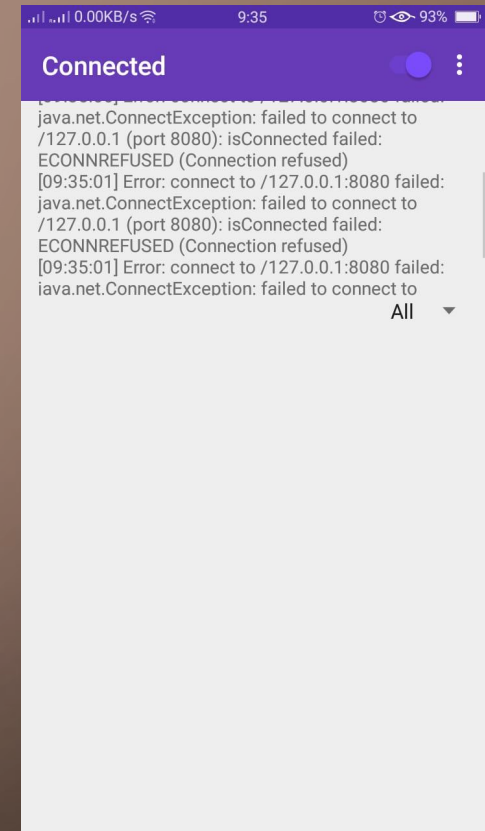
# SETUP PHASE



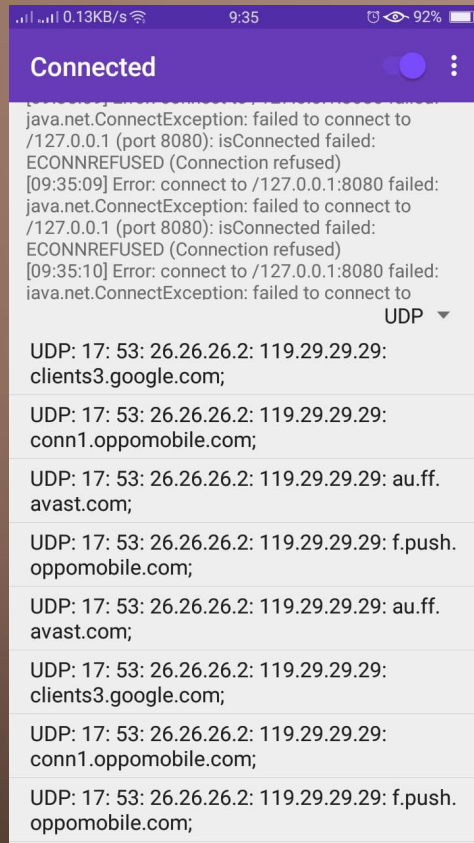
Landing Page



Permission Requirements



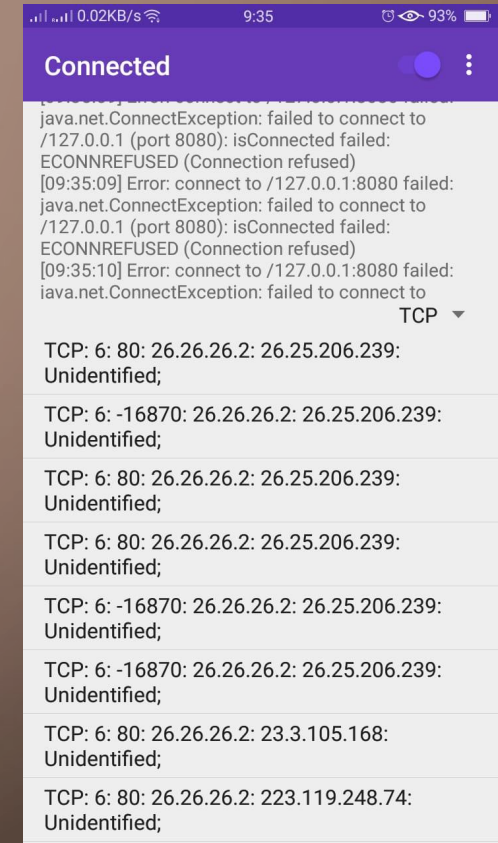
Analysis Ready



UDP Packets



All Packets



TCP Packets

The background is a dark brown gradient. In the corners, there are decorative elements resembling circuit board traces or neural network connections. These consist of thin, light-colored lines that branch out and terminate in small circles. The lines are more dense in the bottom-left and top-left corners, and more sparse in the top-right and bottom-right corners.

THANK YOU