# **Project 4: Port Scanner**

### Introduction

Port Scanners can be used to probe remote hosts to open ports. This project is implemented with IPV4 support. This project is implemented in C language. This portscanner performs TCP SYN (Half-open), TCP NULL, FIN and Xmas scans. These types of scans are available to only privileged users.

## Implementation details

The code has been implemented in PortScanner.c

### PortScanner.c

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get\_task: This is where we calculate what tasks to do and we here divide it basing on the ipaddress, ports and scans which are to be done.

parseargs: Parsing the command line options

start\_work:

classify\_porttype: We here classify the port type as filtered,unfiltered,open,closed,open|filtered.

**EXECUTION:** 

gcc portScanner.c -lpcap -lm

**COMPLIATION:** 

Example: \$ sudo nice./a.out --ports 6-9 --ip 129.79.246.89 --scan SYN NULL

### Resources

- http://sock-raw.org/papers/syn\_scanner
- http://www.tcpdump.org/pcap.htm
- <a href="https://github.com/">https://github.com/</a>
- http://www.binarytides.com
- http://beej.us/guide/bgnet/
- http://en.wikipedia.org/wiki/Transmission\_Control\_Protocol#TCP\_checksum\_for\_IPv4