

# Portscanner

# Aim of project

- Implement a portscanner in C
- Various scan methods e.g. TCP connect scan, TCP SYN scan ...
- Console program like nmap

# Implemented Scan Methods

- TCP connect scan
- TCP syn scan
- NULL scan
- XMAS scan
- FIN scan
- Maimon scan

# Implementation

- SOCK\_STREAM socket (TCP socket)
- Use connect() function to try to establish a connection with the target machine
- Check return value of connect() function
- Return value 0 = port is open, else port closed

# TCP connect scan

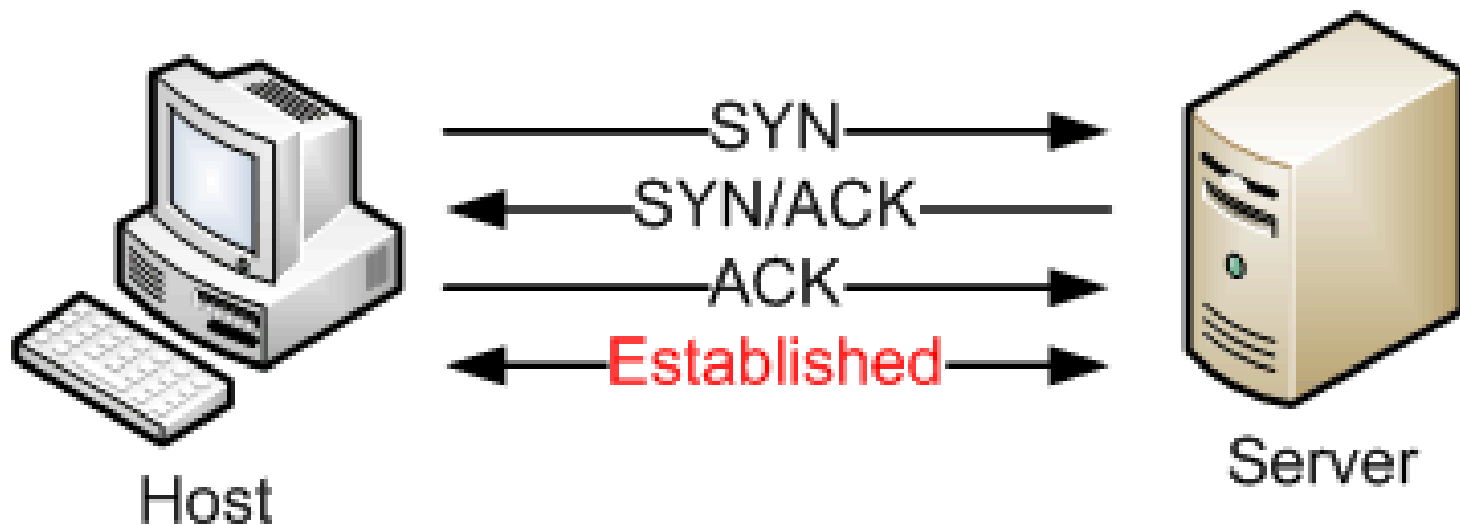
- Simple approach
- Use system call `connect()` to try to establish a connection
- If connection successful port is open
- Else port is closed

# Implementation

- SOCK\_STREAM socket (TCP socket)
- Use connect() function to try to establish a connection with the target machine
- Check return value of connect() function
- Return value 0 = port is open, else port closed

# TCP Handshake

## TCP Three-Step Handshake



# Syn scan



# Raw socket

# Implementation