Task 1: Scan Your Local Network for Open Ports

After scanning my local network using the TCP SYN scan (Nmap -sS), I identified **three open TCP ports** on one of the devices in my network. These open ports correspond to specific services running on that machine. Below is a breakdown of the ports and their associated services:

Port	State	Services
902	Open	iss-realsecure
912	Open	apex-mesh
5357	Open	wsdapi

1. Port 902 – VMware Service (iss-realsecure)

This port is usually used by **VMware**, a software for running virtual machines (like running Windows inside Linux). If this service is active, it means the device might be set up for managing virtual machines remotely.

- ➔ **Why it matters:** If you're not using VMware, this open port might be unnecessary and should be closed to prevent outsiders from trying to exploit it.

2. Port 912 – Unknown or Custom Service (apex-mesh)

This one is a bit of a mystery. It doesn't belong to any common service, which could mean it's used by **custom software**, an **IoT device**, or something that was installed manually.

- ➔ **Why it matters:** Unknown services can be **risky**, especially if you're not sure what they do. Hackers often look for these to find a way into your system.
- ➔ **What to do:** I would check what app is using it and turn it off if it’s not needed.

3. Port 5357 – Windows Device Discovery (wsdapi)

This port is used by **Windows to find other devices** on the network like printers or scanners. It's part of something called "Web Services for Devices.

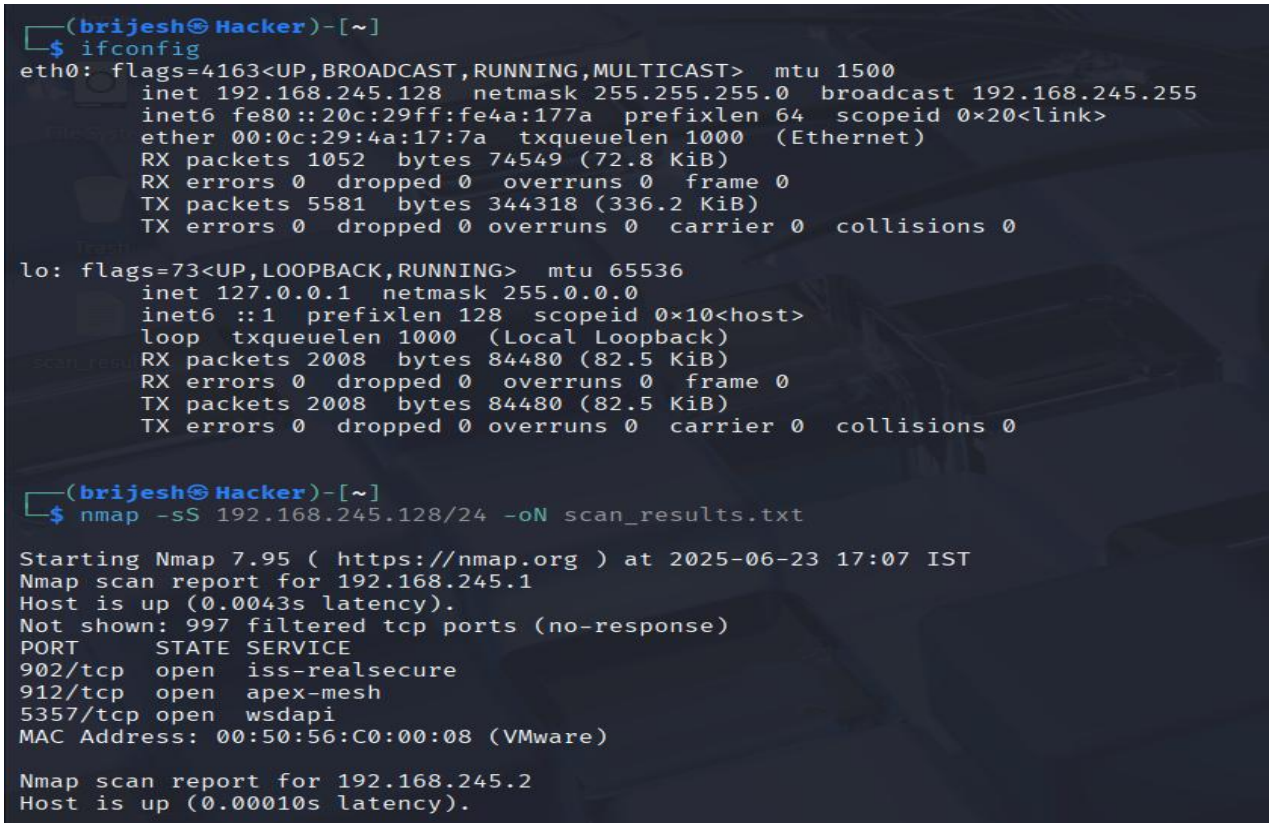
- ➔ **Why it matters:** This port is usually safe **inside a home network** but shouldn't be open on public networks because it can reveal device information.

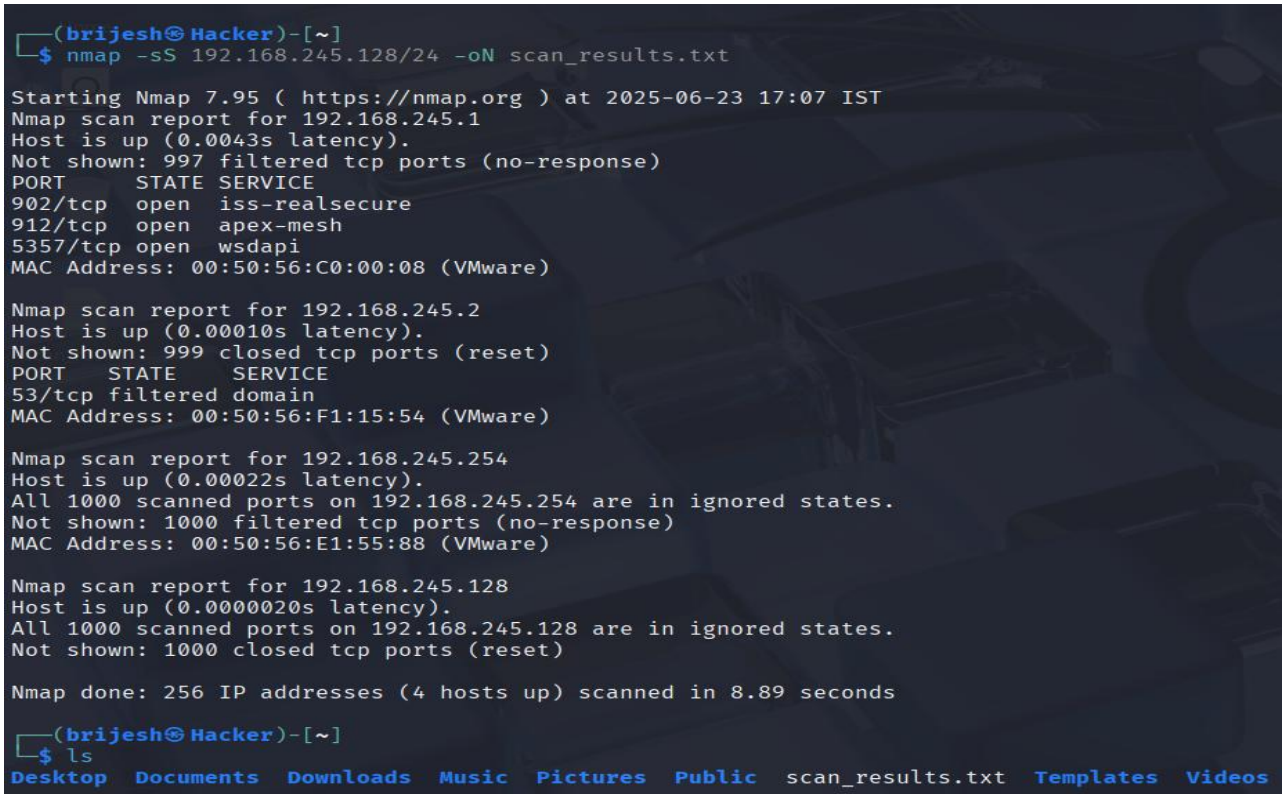
What I Learned

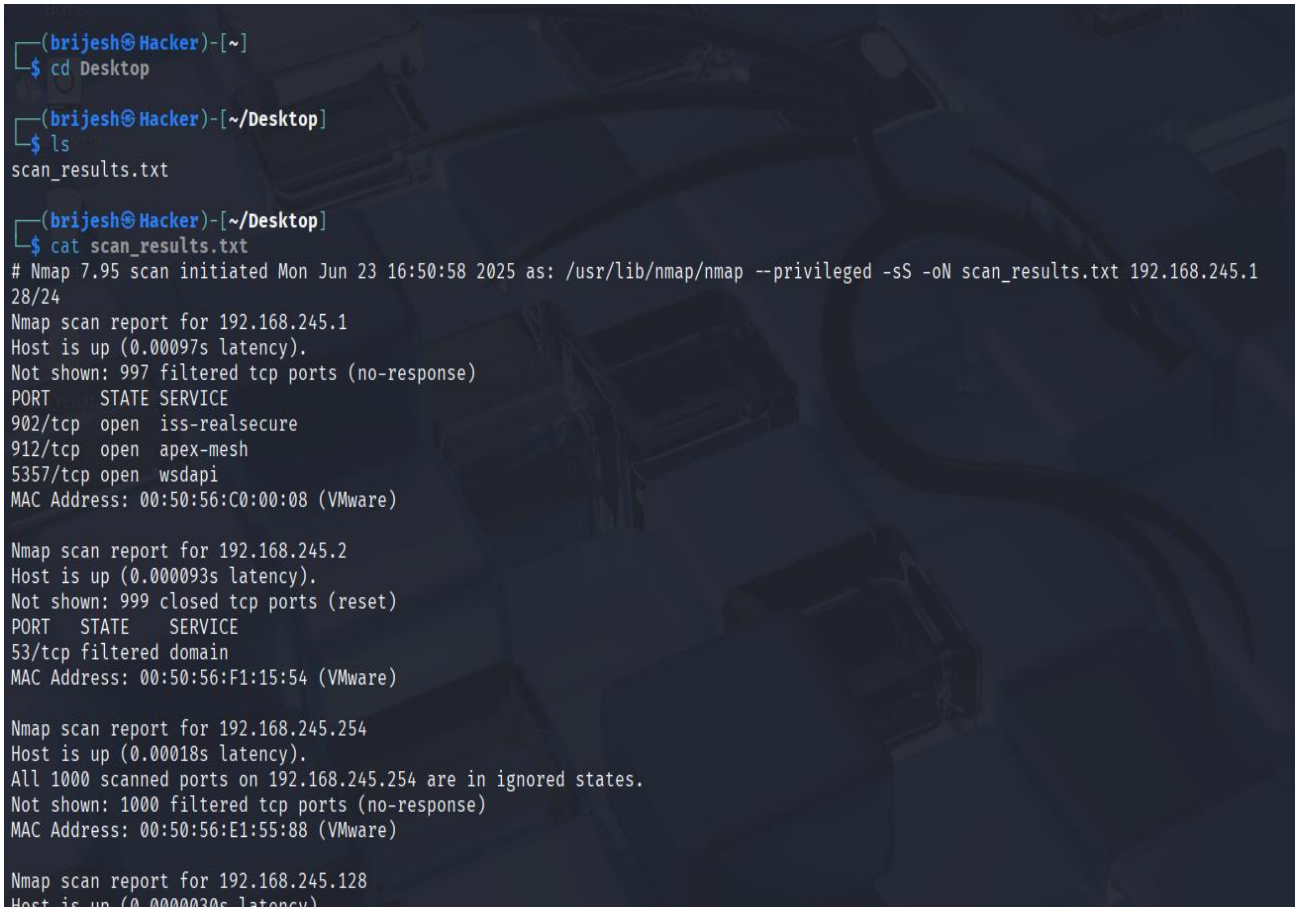
- ➔ Every open port represents a **service or feature** running on a device.
- ➔ Some of them are important, others might be unnecessary or even dangerous.

➔ Tools like **Nmap** help you **see what's exposed** on your network so you can protect it.

➔ Keeping track of open ports helps improve your **network security** by closing or restricting the ones you don't need.






┌──(brijesh㉿Hacker)-[~]
└─$ cd Desktop
┌──(brijesh㉿Hacker)-[~/Desktop]
└─$ ls
scan_results.txt
┌──(brijesh㉿Hacker)-[~/Desktop]
└─$ cat scan_results.txt
Nmap 7.95 scan initiated Mon Jun 23 16:50:58 2025 as: /usr/lib/nmap/nmap --privileged -sS -oN scan_results.txt 192.168.245.1
28/24
Nmap scan report for 192.168.245.1
Host is up (0.00097s latency).
Not shown: 997 filtered tcp ports (no-response)
PORT STATE SERVICE
902/tcp open iss-realsecure
912/tcp open apex-mesh
5357/tcp open wsdapi
MAC Address: 00:50:56:C0:00:08 (VMware)
Nmap scan report for 192.168.245.2
Host is up (0.000093s latency).
Not shown: 999 closed tcp ports (reset)
PORT STATE SERVICE
53/tcp filtered domain
MAC Address: 00:50:56:F1:15:54 (VMware)
Nmap scan report for 192.168.245.254
Host is up (0.00018s latency).
All 1000 scanned ports on 192.168.245.254 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 00:50:56:E1:55:88 (VMware)
Nmap scan report for 192.168.245.128