✅ How to Run a Packet Sniffer Script Using Scapy on Windows

💻 Requirements

- Python installed
- Scapy library
- Npcap (needed for sniffing packets)
- Admin privileges to run scripts

🔧 Step-by-Step Setup

1. ✅ **Install Python (if not installed)**

Download and install Python from:

https://www.python.org/downloads/

During installation, make sure to check:

```
☑ Add Python to PATH
```

2. ✅ **Install Scapy**

Open **Command Prompt** and run:

```bash
pip install scapy
```

If `pip` is not recognized, use:

```bash
python -m pip install scapy
```

3. ⚠️ **Install Npcap**

Scapy uses **Npcap** (or WinPcap) to access low-level packet data.

- Download from: https://npcap.com/#download
- During installation, make sure to check:

```
☑ Install Npcap in WinPcap API-compatible Mode
```

4. 🛡️ **Run the Script with Admin Rights**

Your code (e.g., `Packet_Sniffing.py`) needs to be run as **Administrator**.

Open Command Prompt as admin:

- Search `cmd` in Start menu

- Right-click → "Run as Administrator"

Then run:

```bash

python Packet_Sniffing.py

```

🔁 Optional: Fix Error Without Npcap (Layer 3 fallback)

If you can’t install Npcap, change this:

```python

sniff(prn=analyze_packet, count=10)

```

To:

```python

from scapy.config import conf

conf.L2socket = conf.L3socket

sniff(prn=analyze_packet, count=10)

```

It’s a workaround using Layer 3 (IP level only).

🧪 Final Output

Once setup is done, you’ll see packet details like:

```

Source Port: 80

Destination Port: 50135
```