Packet Sniffer

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Add your content using reStructuredText syntax. See the reStructuredText documentation for details.

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PKTSNIFFER MODULE

pktsniffer.py

packet sniffer that: 1. Reads packets from a .pcap file using Scapy 2. Filters by host, IP, port, network, or protocol 3. Prints packet details

Usage:

```
python pktsniffer.py -r file.pcap [filters...]
```

pktsniffer.arguments()

Parse command line arguments.

Returns

Parsed arguments from command line

Return type

argparse.Namespace

pktsniffer.main()

Main for pktsniffer.py 1. Parse arguments 2. Read pcap file 3. Filter packets 4. Print results

pktsniffer.packet_filter(packets, args)

Filter packets based on arguments

Parameters

- packets (list) List of packet dictionaries
- args (argparse) arguments specifying filters

Returns

List of filtered packets

Return type

list

pktsniffer.print_packet(packet)

Print the details of a single packet:

- 1. Ethernet layer
- 2. IP layer
- 3. Encapsulated protocols

Parameters

packet (dict) - dictionary parsed packet

```
pktsniffer.read_file(args)
```

Read packets from the .pcap file and convert each into a JSON dict.

Parameters

args (argparse.Namespace) - arguments from command line

Returns

List of packet JSON dicts

Return type

list

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