



This section covers different scripting labs where the user has been provided with an emulated WiFi environment. Python and the scapy library are installed on the machine. The user has to write the Python program to complete the given task.

What will you learn?

- Parsing, analyzing WiFi frames with Python
- Sniffing WiFi traffic in monitor mode
- Writing custom program to list SSIDs/BSSIDs, clients, PNLs, uncover hidden SSIDs

References:

1. Scapy library (<https://scapy.readthedocs.io/en/latest/introduction.html>)

Labs Covered:

- [Parsing Beacons from PCAP](#)
In this lab, you will learn to write a Python program to read the packets from a PCAP file, identify and parse the beacon frames to list the BSSIDs/SSIDs.
- [Parsing Probes from PCAP](#)
In this lab, you will learn to write a Python program to read the packets from a PCAP file, identify and parse the probe requests frames to list the client MAC with corresponding probed SSIDs.
- [SSID Sniffer \(Raw Sockets\)](#)
In this lab, you will learn to write a Python program to use raw sockets to sniff the WiFi traffic and print the list of SSIDs.
- [Scapy: SSID Sniffer](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and print the list of SSIDs using the Scapy python library.
- [Scapy: Probe Sniffer](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and print the list of probed SSIDs using the Scapy python library.
- [Scapy: Packet Summary](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and print the packet summary using the Scapy python library.
- [Scapy: Uncover Hidden SSID](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and find the SSID of a hidden network operating in the vicinity using the Scapy python library.
- [Scapy: Unique Probed SSIDs](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and create a list of unique probed SSIDs using the Scapy python library.
- [Scapy: All probes from a Client](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and create a list of SSIDs probed by a specific client using the Scapy python library.
- [Scapy: All BSSIDs for an SSID](#)
In this lab, you will learn to write a Python program to sniff the WiFi traffic and create a list of BSSIDs for a specific SSID.