WEP & WPA Security lab

**Unit 9 – Wireless security & Availability**

# wep & wpa security lab

**Lab Description:** In this lab you will use packet captures of wireless 802.11 traffic between a client and access point. Specifically, traffic for both WEP and WPA protocols.

**Lab Environment:** Kali Linux OS w/ Aircrack-NG tool.

**Lab Files that are Needed:** WEP\_capture\_Unit9\_.pcap , WPA\_capture\_Unit9.pcap

### **analyzing pcap**

1. What specific frame is needed in order to crack a WPA2 key?
2. Utilizing the Aircrack-NG tool and the pcap file, crack both the WEP and WPA2 keys.
   1. Screenshot of the frames needed for cracking.
   2. Screenshot of Aircrack-NG tool and commands to crack the keys.
   3. Cracked WEP key:
   4. Cracked WPA2 key:

**ENCRYPTION RESEARCH**

1. What is the difference between RC4 and AES?
2. Explain the difference between block and stream ciphers.
3. What other stream ciphers exist?

## What to submit

Screenshots and a description of each part/question in a Word Document or PDF.