# Module 9 Challenge

#### MISSION 1.

Command: nslookup -type=MX starwars.com

When we look at the mail exchanger for starwars.com, we see the new primary and secondary server are not added here.

This is why they are not receiving any emails.

The correct DNS configuration should be:

```
starwars.com mail exchanger = 1 asltx.1.google.com
starwars.com mail exchanger = 5 asltx.2.google.com
```

#### MISSION 2.

theforce.net with new IP of 45.23.176.21

Command: **nslookup -type=TXT theforce.net** 

Shows a different IP address in the configuration of 45.63.15.159

This is why the emails are going to spam or being blocked.

Need to configure the IP to 45.23.176.21

### MISSION 3.

Not redirecting from resistance.theforce.net to theforce.net

Command: nslookup -type=all www.theforce.net

Shows the canonical name of theforce.net

This needs to be set to the alias resistance.theforce.net

And they will start redirecting again.

```
sysadmin@vm-image-ubuntu-dev-1:~$ nslookup -type=all www.theforce.net
unknown query type: all
Server: 8.8.8.8
Address: 8.8.8.8#53

Non-authoritative answer:
www.theforce.net canonical name = theforce.net.
Name: theforce.net
Address: 45.63.4.215
```

### MISSION 4.

DNS server: princessleia.site

Backup DNS server: ns2.galaxybackup.com

Command: nslookup -type=NS princessleia.site

Shows two servers:

princessleia.site nameserver = ns25.domaincontrol.com

princessleia.site nameserver = ns26.domaincontrol.com

```
sysadmin@vm-image-ubuntu-dev-1:~$ nslookup -type=NS princessleia.site
Server: 8.8.8.8
Address: 8.8.8.8#53

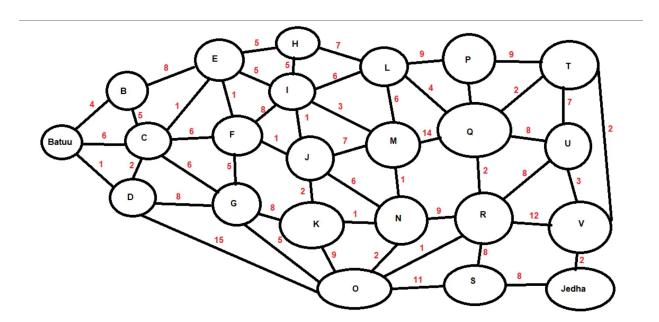
Non-authoritative answer:
princessleia.site nameserver = ns25.domaincontrol.com.
princessleia.site nameserver = ns26.domaincontrol.com.
Authoritative answers can be found from:
```

Need to append the new backup DNS server to this list and it will be all good.

# princessleia.site nameserver = ns2.galaxybackup.com

# MISSION 5.

After examining multiple routes, it has been determined the shortest path is:



### MISSION 6.

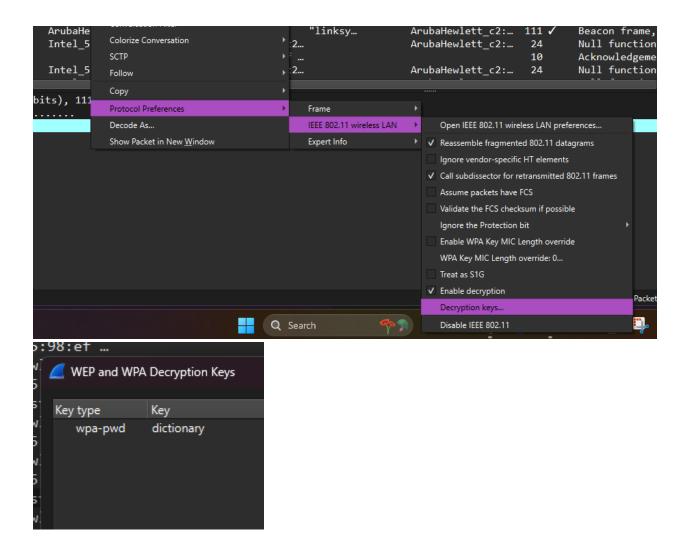
Needed to download the pcap file to VM. After doing this, I was able to navigate to the Downloads directory and run the following command.

Command: aircrack-ng -w /usr/share/wordlists/rockyou.txt Darkside.pcap

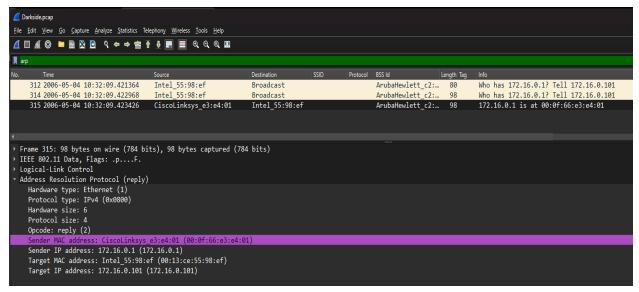
Key found: dictionary

```
image-ubuntu-dev-1:~/Downloads$ aircrack-ng -w /usr/share/wordlists/rockyou.txt Darkside.pcap
Reading packets, please wait...
Opening Darkside.pcap
Read 586 packets.
   # BSSID
                           ESSID
                                                        Encryption
   1 00:0B:86:C2:A4:85 linksys
                                                        WPA (1 handshake)
Choosing first network as target.
Reading packets, please wait...
Opening Darkside.pcap
Read 586 packets.
1 potential targets
                                  Aircrack-ng 1.6
      [00:00:02] 6740/14344391 keys tested (2776.44 k/s)
      Time left: 1 hour, 26 minutes, 4 seconds
                                                                        0.05%
                            KEY FOUND! [ dictionary ]
                       : 5D F9 20 B5 48 1E D7 05 38 DD 5F D0 24 23 D7 E2 52 22 05 FE EE BB 97 4C AD 08 A5 2B 56 13 ED E2
      Master Key
```

Now that I have found the key, I can go over to Wireshark and examine the decrypted ARP traffic to find the IP and MAC address of the Dark Side's host.
Navigate my way to Decryption keys. I add wpa-pwd dictionary



Then I can filter ARP, click the 3<sup>rd</sup> line because this is the reply. In the bottom pane I can see the sender IP and the sender MAC addresses.



Host IP address is: 172.16.0.1

Host MAC address: **00:0f:66:e3:e4:01** 

#### MISSION 7.

Hidden message in the TXT from DNS record in Mission 4.

DNS record from Mission 4 is princessleia.site

```
sysadmin@vm-image-ubuntu-dev-1:-$ nslookup -type=TXT princessleia.site
Server: 8.8.8.8
Address: 8.8.8.8#53
Non-authoritative answer:
princessleia.site text = "Run the following in a command line: telnet towel.blinkenlights.nl or as a backup access in a browser: www.asciimation.co.nz"
Authoritative answers can be found from:
```

When I ran the command telnet towel.blinkenlights.nl

A short, animated film started to play about starwars episode IV. Pretty cool surprise.

(Star ASCIImotion Wars).... can also be viewed here: www.asciimation.co.nz



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Last scene added: January 2015

<u>Frequently asked questions</u> <u>My other projects</u> <u>Original Java Asciimation</u> <u>The death of Jar Jar</u>

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