Networking II Challenge Submission File

In a Network Far, Far Away!

Mission 1

1. Mail servers for starwars.com:

```
[starwars.com      mail exchanger = 1 aspmx.l.google.com.
starwars.com       mail exchanger = 10 aspmx2.googlemail.com.
starwars.com       mail exchanger = 5 alt1.aspx.l.google.com.
starwars.com       mail exchanger = 10 aspmx3.googlemail.com.
starwars.com       mail exchanger = 5 alt2.aspmx.l.google.com.]
```

2. Explain why the Resistance isn't receiving any emails:

```
[primary and secondary servers are not configured]
```

3. Suggested DNS corrections:

```
[Add new primary asltx.l.google.com and secondary asltx.2.google.com]
```

Mission 2

1. Sender Policy Framework (SPF) of theforce.net:

```
[text = "v=spf1 a mx a:mail.wise-advice.com mx:smtp.secureserver.net
include:aspmx.googlemail.com ip4:104.156.250.80 ip4:45.63.15.159
ip4:45.63.4.215  ip4:104.207.135.156 ~all"]
```

2. Explain why the Force's emails are going to spam:

```
[Its missing the new IP address of the mail server]
```

3. Suggested DNS corrections:

```
[Add new IP address to record]
```

Mission 3

1. Document the CNAME records:

```
sysadmin@UbuntuDesktop:~$ nslookup -q=CNAME www.theforce.net
Server:          8.8.8.8
Address:         8.8.8.8#53

Non-authoritative answer:
www.theforce.net          canonical name = theforce.net.

Authoritative answers can be found from:
```

2. Explain why the subpage `resistance.theforce.net` isn't redirecting to `theforce.net`:

```
[resistance.theforce.net is not the sub domain]
```

3. Suggested DNS corrections:

```
[update the CNAME to resistance.theforce.net]
```

Mission 4

1. Confirm the DNS records for `princessleia.site`:

```
[princessleia.site      nameserver = ns26.domaincontrol.com.
princessleia.site nameserver = ns25.domaincontrol.com.]
```

2. Suggested DNS record corrections to prevent the issue from occurring again:

```
[Add ns2.galaxybackup.com as backup to the DNS records]
```

Mission 5

1. Document the shortest `OSPF` path from Batuu to Jedha:

   a. `OSPF` path:

```
[Batuu->D->C->E->F->J->I->L->Q->T->V->Jedha]
```

   b. `OSPF` path cost:

```
[23, 11 hops]
```

Mission 6

1. Wireless key:

[

```
                    sysadmin@UbuntuDesktop: ~/Downloads                    ⊖ ▢ ⊗
 File  Edit  View  Search  Terminal  Help
   1  00:0B:86:C2:A4:85  linksys                    WPA (1 handshake)

Choosing first network as target.

Opening Darkside.pcap
Reading packets, please wait...

                        Aircrack-ng 1.2 rc4

   [00:00:01] 2280/7120714 keys tested (2124.21 k/s)

   Time left: 55 minutes, 51 seconds                         0.03%

                    KEY FOUND! [ dictionary ]


   Master Key     : 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

   Transient Key  : 1B 7B 26 96 03 F0 6C 6C D4 03 AA F6 AC E2 81 FC
                    55 15 9A AF BB 3B 5A A8 69 05 13 73 5C 1C EC E0
                    A2 15 4A E0 99 6F A9 5B 21 1D A1 8E 85 FD 96 49
                    5F B4 97 85 67 33 87 B9 DA 97 97 AA C7 82 8F 52
```

]

2. Host IP addresses and MAC addresses:

     a. Sender MAC address:

[00:0f:66:e3:e4:01]

     b. Sender IP address:

[172.16.0.1]

     c. Target MAC address:

[00:13:ce:55:98:ef]

     d. Target IP address:

```
[172.16.0.101]
```

Mission 7

1. Screenshot of results:

[

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