



Cybersecurity

Networking II Challenge Submission File

In a Network Far, Far Away!

Make a copy of this document to work in, and then for each mission, add the solution below the prompt. Save and submit this completed file as your Challenge deliverable.

Mission 1

1. Mail servers for starwars.com:

```
nslookup -type=mx starwars.com
```

```
(kali㉿kali)-[~]  
$ nslookup -type=mx starwars.com  
Server:      8.8.8.8  
Address:     8.8.8.8#53  
  
Non-authoritative answer:  
starwars.com mail exchanger = 10 aspmx2.googlemail.com.  
starwars.com mail exchanger = 5 alt1.aspx.l.google.com.  
starwars.com mail exchanger = 1 aspmx.l.google.com.  
starwars.com mail exchanger = 5 alt2.aspmx.l.google.com.  
starwars.com mail exchanger = 10 aspmx3.googlemail.com.  
  
Authoritative answers can be found from:  
  
(kali㉿kali)-[~]  
$ ss
```

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

The listed URLs for the email exchange server are incorrect

3. Suggested DNS corrections:

The e-mail exchangers should be

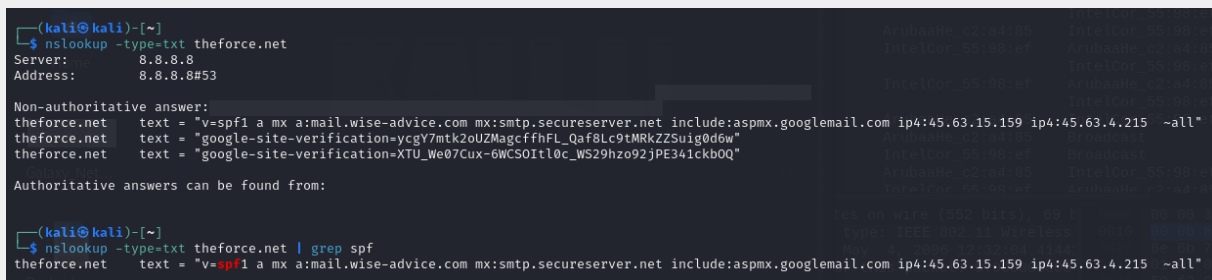
asltx.1.google.com

asltx.2.google.com

Mission 2

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

```
nslookup -type=txt theforce.net
nslookup -type=txt theforce.net | grep spf
```



```
(kali@kali)-[~]
$ nslookup -type=txt theforce.net
Server:      8.8.8.8
Address:     8.8.8.8#53

Non-authoritative answer:
theforce.net text = "v=spf1 a mx a:mail.wise-advice.com mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:45.63.15.159 ip4:45.63.4.215 ~all"
theforce.net text = "google-site-verification=ycgY7mtk2oUZMagcfffFL_Qaf8Lc9tMRkZ2Sui80d6w"
theforce.net text = "google-site-verification=XTU_We07Cux-6WCS0Itl0c_WS29hzo92jPE341ckbOQ"

Authoritative answers can be found from:

(kali@kali)-[~]
$ nslookup -type=txt theforce.net | grep spf
theforce.net text = "v=spf1 a mx a:mail.wise-advice.com mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:45.63.15.159 ip4:45.63.4.215 ~all"
```

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

The server IP listed in the SPF record is incorrect which is why the emails are going to spam.

3. Suggested DNS corrections:

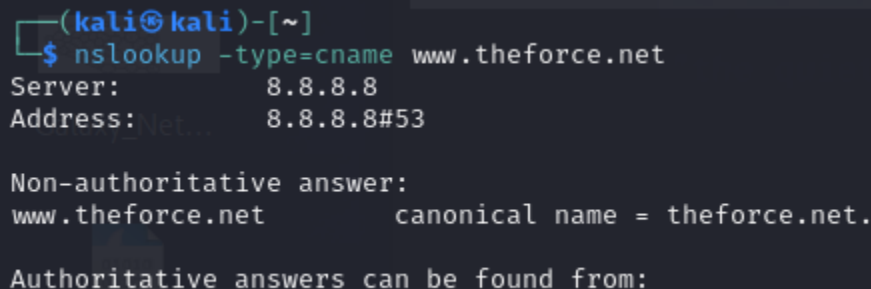
The corrected DNS should include the IP address: 45.23.176.21

```
theforce.net      text = "v=spf1 a mx a:mail.wise-advice.com
mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:45.63.15.159
ip4:45.63.4.215 ip4:45.23.176.21 ~all"
```

Mission 3

1. Document the CNAME records:

```
nslookup -type=cname www.theforce.net
```



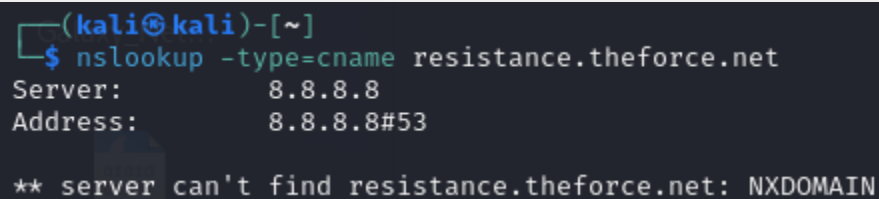
```
(kali㉿kali)-[~]
$ nslookup -type=cname www.theforce.net
Server:      8.8.8.8
Address: 8.8.8.8#53

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:

```
nslookup -type=cname resistance.theforce.net
```



```
(kali㉿kali)-[~]
$ nslookup -type=cname resistance.theforce.net
Server:      8.8.8.8
Address: 8.8.8.8#53

** server can't find resistance.theforce.net: NXDOMAIN
```

The “** server can't find resistance.theforce.net: NXDOMAIN” means that resistance.theforce.net does not have a CNAME record associated with it. Hence you can't find it.

3. Suggested DNS corrections:

The CNAME record would need to be corrected to
resistance.theforce.net canonical name = theforce.net

Mission 4

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

```
nslookup -type=ns princessleia.site
```

```
(kali㉿kali)-[~]  
$ nslookup -type=ns princessleia.site  
Server:      8.8.8.8  
Address:     8.8.8.8#53  
Galaxy Net...  
Non-authoritative answer:  
princessleia.site      nameserver = ns25.domaincontrol.com.  
princessleia.site      nameserver = ns26.domaincontrol.com.  
  
Authoritative answers can be found from:
```

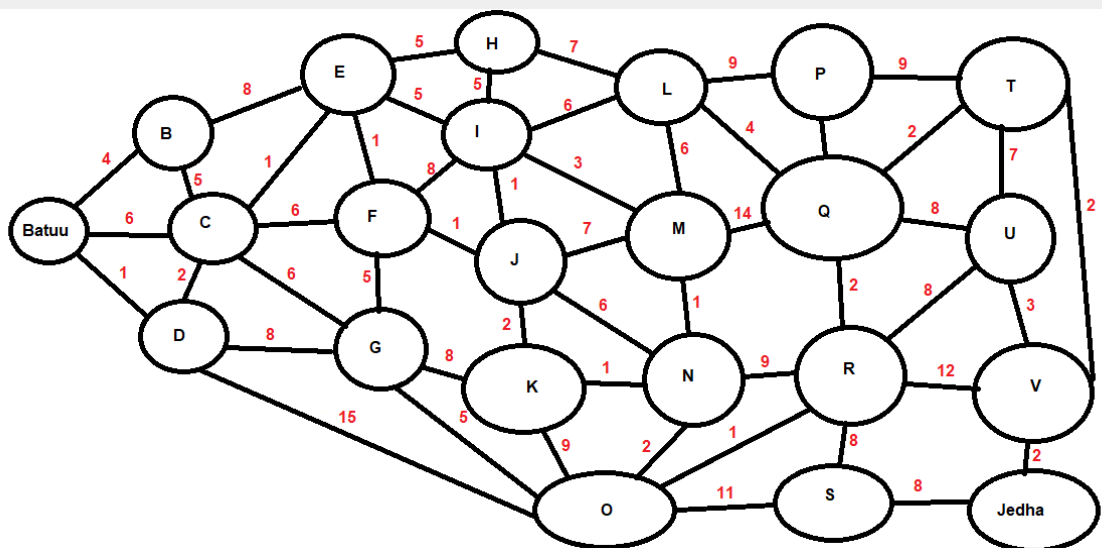
2. Suggested DNS record corrections to prevent the issue from occurring again:

Suggested DNS record correction would be to add this line
`resistance.theforce.net canonical name = theforce.net.`

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:

The OSPF path cost is 21

Mission 6

1. Wireless key:

```
aircrack-ng Darkside.pcap -w rockyou.txt
```

```

(kali㉿kali)-[~/Desktop]
$ aircrack-ng Darkside.pcap -w rockyou.txt
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 1.7

[00:00:01] 7205/10303727 keys tested (10154.48 k/s)
Time left: 16 minutes, 53 seconds      0.07%

"the quieter" KEY FOUND! [ dictionary ] "the more you are ab

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   : 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
                  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
                  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
                  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

EAPOL HMAC      : 6D 45 F3 53 8E AD 8E CA 55 98 C2 60 EE FE 6F 51

```

2. Host IP addresses and MAC addresses:

a. Sender MAC address:

Cisco-Li_e3:e4:01 (00:0f:66:e3:e4:01)

b. Sender IP address:

172.16.0.1

c. Target MAC address:

IntelCor_55:98:ef (00:13:ce:55:98:ef)

d. Target IP address:

172.16.0.101

Mission 7

1. Screenshot of results:

nslookup -type=txt princessleia.site

```
(kali@kali)~$ nslookup -type=txt princessleia.site
Server:      192.168.0.1
Address:     192.168.0.1#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:
```

```

.....          ccccccc      ccccccc      .....
.....          @         @   @         @         .....
.....          ..ccc     @       @         .....
.....          @@        @         @         .....
.....          cccccccc    ccccccc th      .....
-----
              C E N T U R Y                .....
-----
.....
....          ccccccc ccccccc @   @ ccccccc      ...
==           @         @   @   @         ==
| |          @   ccccc     @         @
[ ]          @   @         @   @   @
| |          @   ccccccc @   @   @

```

**Last scene added:
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