



# 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:

```
Server:      192.168.0.1
Address:     192.168.0.1#53
Non-authoritative answer:
starwars.com mail exchanger = 5 alt1.aspx.l.google.com.
starwars.com mail exchanger = 10 aspmx3.googlemail.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 aspmx2.googlemail.com.
```

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

The primary email aren't listed or set up properly

3. Suggested DNS corrections:

Asltx.l.google.com should be the primary and asltx.2.google.com should be the secondary

## Mission 2

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

```
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:

Since someone changed the ip address of the theforce.net to 45.23.176.21 while the network is down, the email are being obstructed and being sent to spam

### 3. Suggested DNS corrections:

To include the missing ip address of 45.23.176.21 and assuming if all the others are still correct-ip4:45.63.15.159 ip4:45.63.4.215

## Mission 3

### 1. Document the CNAME records:

```
% nslookup -type=cname www.theforce.net  
Server:          192.168.0.1  
Address:         192.168.0.1#53  
Non-authoritative answer:  
www.theforce.net canonical name = theforce.net.
```

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

```
% nslookup -type=CNAME resistance.theforce.net  
Server:          192.168.0.1  
Address:         192.168.0.1#53  
** server can't find resistance.theforce.net: NXDOMAIN  
An error message "NXDOMAIN" popped up and it means non-existent domain/the domain does not exist. Or the server is offline or has issues
```

### 3. Suggested DNS corrections:

The right dns is resistance.theforce.net versus the canonical name = theforce.net.

## Mission 4

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

```
% nslookup -type=ns princessleia.site
Server:          192.168.0.1
Address:         192.168.0.1#53
Non-authoritative answer:
princessleia.site nameserver = ns25.domaincontrol.com.
princessleia.site nameserver = ns26.domaincontrol.com.
Authoritative answers can be found from:
ns25.domaincontrol.com internet address = 97.74.102.13
ns26.domaincontrol.com internet address = 173.201.70.13
ns25.domaincontrol.com has AAAA address 2603:5:2161::d
ns26.domaincontrol.com has AAAA address 2603:5:2261::d
```

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

The backup server <http://ns2.galaxybackup.com> that the Resistance's networking team provided should be included to the nameserver which it is not listed

## Mission 5

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

#### a. OSPF path:

Batuu D to C to E to F to J to I to L to Q to T to V Jedha

#### b. OSPF path cost:

## Mission 6

### 1. Wireless key:

```
B3 52 50 D0 9F 8E AB BD 0D 9E 3D D3 A3 62 12 82
9E FA 89 FC 19 1D A4 4A 3E 7A 40 9C D4 DF 68 DC
```

### 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:

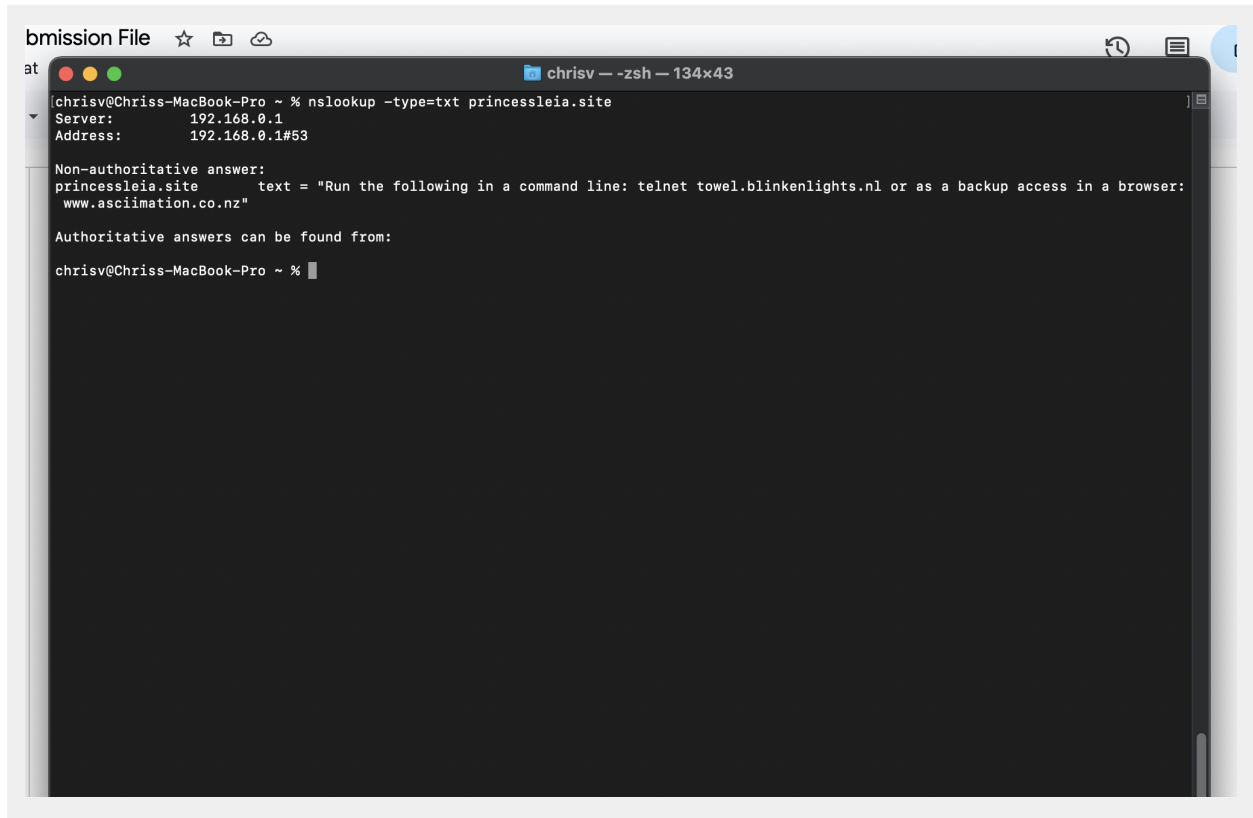
```
IntelCor_55:98:ef (00:13:ce:55:98:ef)
```

#### d. Target IP address:

```
172.16.0.101
```

## Mission 7

### 1. Screenshot of results:

A screenshot of a macOS terminal window titled "bmission File" with standard window controls. The terminal shows a user named "chrisv" in a zsh shell. The command executed is "nslookup -type=txt princessleia.site". The output shows the server IP as 192.168.0.1 and the address as 192.168.0.1#53. A non-authoritative answer follows, indicating a text record with a message to run a telnet command or use a browser. The prompt returns to the user's shell.

```
bmission File ☆ 📁 ☁
at
[chrisv@Chriss-MacBook-Pro ~ % 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:

chrisv@Chriss-MacBook-Pro ~ %
```