| Cybersecurity |
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| Module 9 Challenge Submission File |

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## 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  Comes back with 5 results listed below  starwars.com mail exchanger = 10 aspmx2.googlemail.com.  starwars.com mail exchanger = 5 alt2.aspmx.l.google.com.  starwars.com mail exchanger = 5 alt1.aspx.l.google.com.  starwars.com mail exchanger = 1 aspmx.l.google.com.  starwars.com mail exchanger = 10 aspmx3.googlemail.com. |
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1. Explain why the Resistance isn’t receiving any emails:

| None of the above addresses match the new email servers that were established by the Resistance. The mx records need to be adjusted. |
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1. Suggested DNS corrections:

| starwars.com mail exchanger = asltx.l.google.com  starwars.com mail exchanger = asltx.2.google.com |
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### Mission 2

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

| Nslookup -type=txt theforce.net  Results in the following:  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" |
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1. Explain why the Force’s emails are going to spam:

| Due to theforce.net changing their email IP address while our server was down any emails coming from the IP address 45.23.176.21 isn’t listed in the SPF as an authorized sender. Because of that any emails coming from there are rejected and identified as spam. |
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1. Suggested DNS corrections:

| The correct DNS record should be as follows:  Theforce.net text=”v=spf1 a mx mx:smtp.secureserver.net include:aspmx.googlemail.com ip4:104.156.250.80 ip4:45.63.4.215 ip4:45.23.176.21” |
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### Mission 3

1. Document the CNAME records:

| nslookup -type=cname [www.theforce.net](http://www.theforce.net)  Results in the following:  Non-authoritative answer:  www.theforce.net canonical name = theforce.net. |
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1. Explain why the subpage resistance.theforce.net isn’t redirecting to theforce.net:

| Resistance.theforce.net is not tied to the theforce.net domain. |
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1. Suggested DNS corrections:

| Correct DNS should be similar to as follows:  Non-authorative answer:  [www.theforce.net](http://www.theforce.net) canonical name= theforce.net  Theforce.net canonical name= resistance.theforce.net |
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### Mission 4

1. Confirm the DNS records for princessleia.site:

| nslookup -type=ns princessleia.site  Outputs the following:  Non-authoritative answer:  princessleia.site nameserver = ns25.domaincontrol.com.  princessleia.site nameserver = ns26.domaincontrol.com. |
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1. Suggested DNS record corrections to prevent the issue from occurring again:

| To correct the DNS record we need to add the backup server to the server list. Doing so would return the following when running the above command.  Non-authoritative answer:  princessleia.site nameserver = ns25.domaincontrol.com.  princessleia.site nameserver = ns26.domaincontrol.com.  Princessleia.site nameserver = ns2.galaxybackup.com. |
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### Mission 5

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

| Shortest Path is: Batuu-D-O-R-Q-T-V |
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* 1. OSPF path cost:

| 24 |
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### Mission 6

1. Wireless key:

| dictionary |
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1. Host IP addresses and MAC addresses:
   1. Sender MAC address:

| 00:0f:66:e3:e4:01 |
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* 1. Sender IP address:

| 172.16.0.1 |
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* 1. Target MAC address:

| 00:13:ce:55:98:ef |
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* 1. Target IP address:

| 172.16.0.101 |
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### Mission 7

1. Screenshot of results:

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