

Course: Cloud and Network Security-C1-2026
Cyber Shujaa Program

Week 3: Examining Network Layers 4-7
Assignment 1: TryHackMe: DNS In Detail

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Introduction

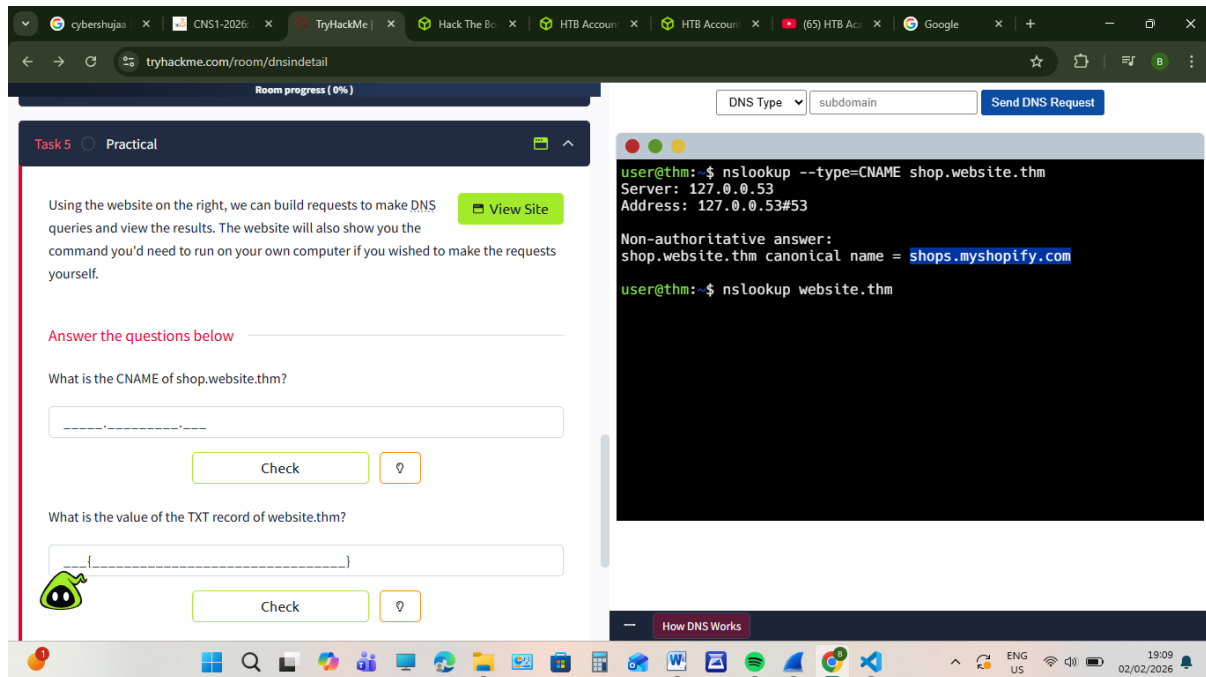
The purpose of this assignment was to develop an understanding of the operation of the Domain Name System (DNS) and how domain name resolution occurs in a networked environment.

Objectives

The objectives of the assignment were:

1. To understand the basic concept and purpose of the Domain Name System(DNS)
2. To explain how domain names are resolved into IP addresses
3. To identify the key components involved in the DNS resolution process
4. To understand the role of DNS in network communication and security

1. The CNAME of shop.website.thm



Task 5 Practical

Using the website on the right, we can build requests to make DNS queries and view the results. The website will also show you the command you'd need to run on your own computer if you wished to make the requests yourself.

[View Site](#)

Answer the questions below

What is the CNAME of shop.website.thm?

[Check](#) [?](#)

What is the value of the TXT record of website.thm?

[Check](#) [?](#)

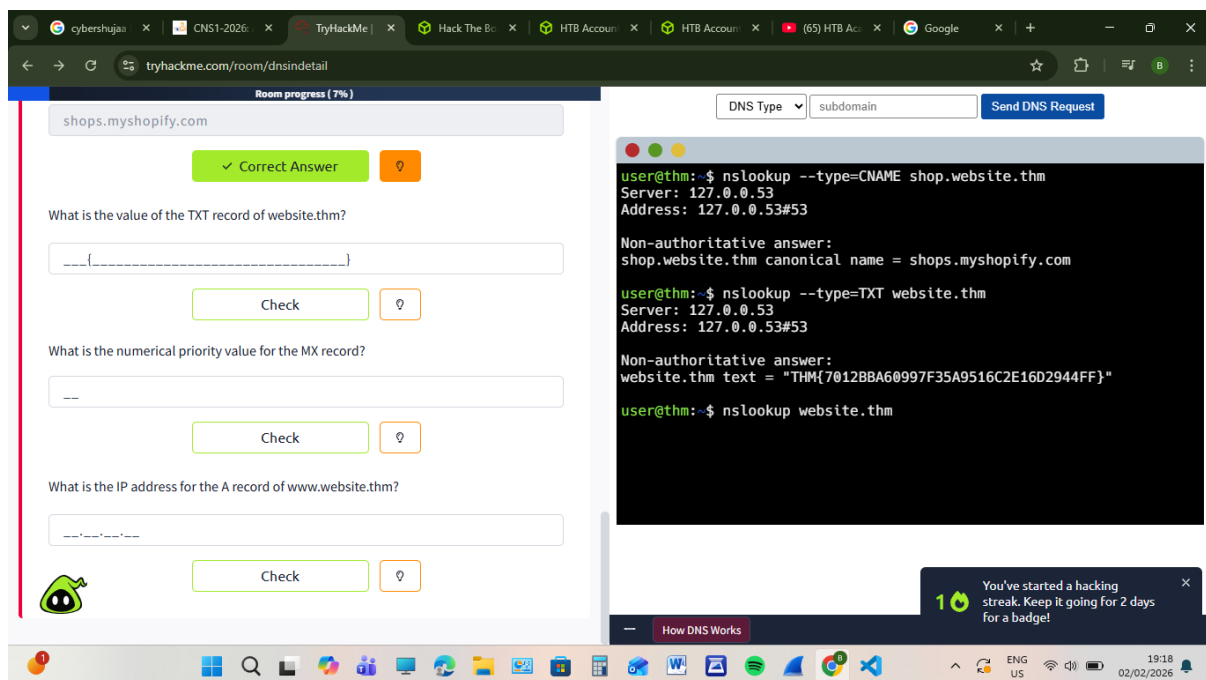
```
user@thm:~$ nslookup --type=CNAME shop.website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
shop.website.thm canonical name = shops.myshopify.com

user@thm:~$ nslookup website.thm
```

The CNAME of the shop.website.thm is shop.myshopify.com

2. What is the value of the TXT record of website.thm?



Room progress (7%)

shops.myshopify.com

[Correct Answer](#) [?](#)

What is the value of the TXT record of website.thm?

[Check](#) [?](#)

What is the numerical priority value for the MX record?

[Check](#) [?](#)

What is the IP address for the A record of www.website.thm?

[Check](#) [?](#)

```
user@thm:~$ nslookup --type=CNAME shop.website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
shop.website.thm canonical name = shops.myshopify.com

user@thm:~$ nslookup --type=TXT website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

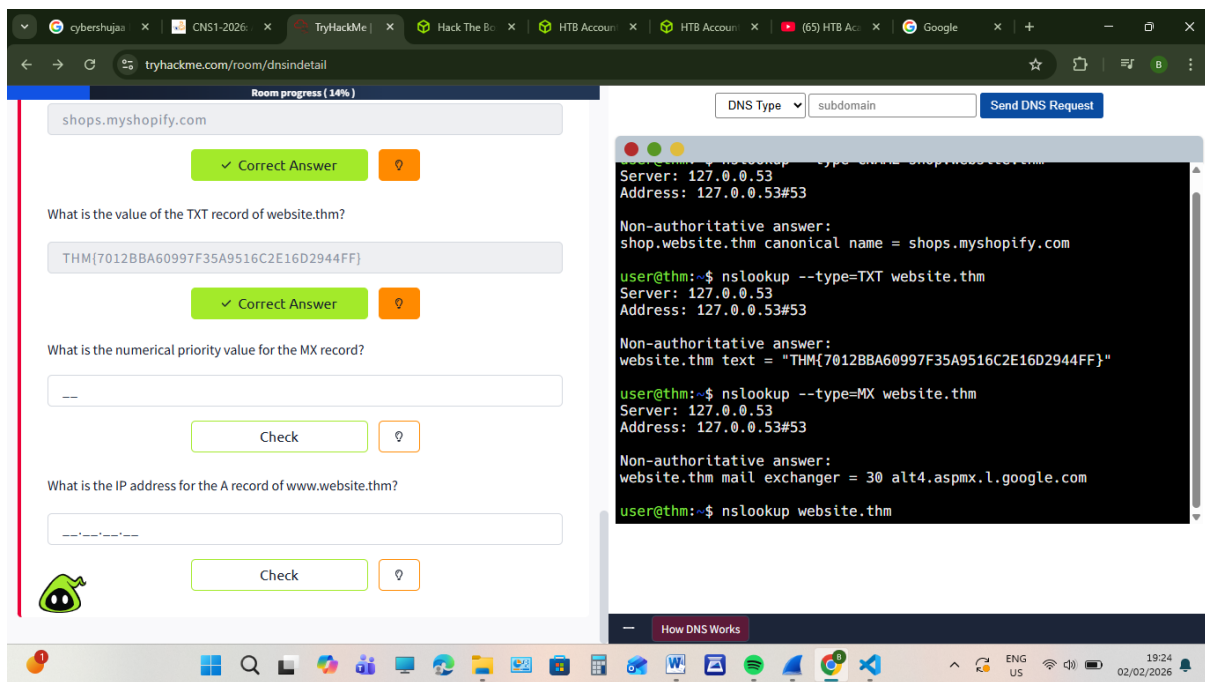
Non-authoritative answer:
website.thm text = "THM{7012BBA60997F35A9516C2E16D2944FF}"

user@thm:~$ nslookup website.thm
```

10 You've started a hacking streak. Keep it going for 2 days for a badge!

THM{7012BBA60997F35A9516C2E16D2944FF}

3. What is the numerical priority value for the MX record?



Room progress (14%)

shops.myshopify.com

✓ Correct Answer

What is the value of the TXT record of website.thm?

THM{7012BBA60997F35A9516C2E16D2944FF}

✓ Correct Answer

What is the numerical priority value for the MX record?

30

Check

What is the IP address for the A record of www.website.thm?

Check

How DNS Works

```

Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
shop.website.thm canonical name = shops.myshopify.com

user@thm:~$ nslookup --type=TXT website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
website.thm text = "THM{7012BBA60997F35A9516C2E16D2944FF}"

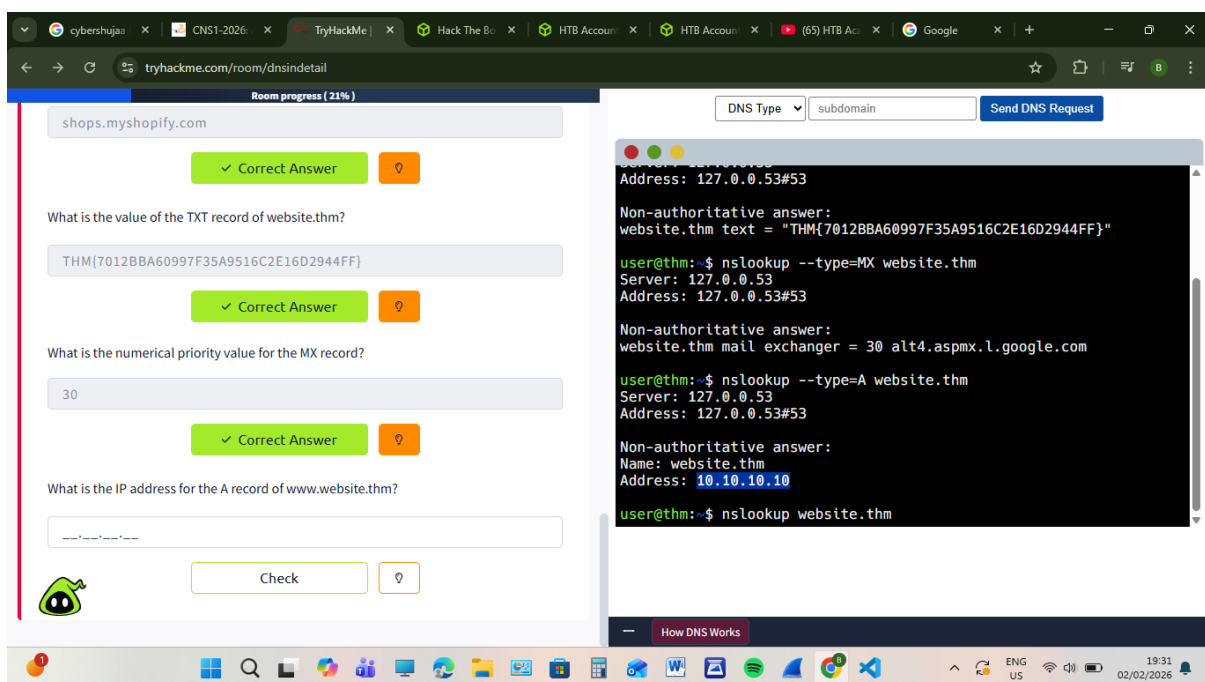
user@thm:~$ nslookup --type=MX website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
website.thm mail exchanger = 30 alt4.aspmx.l.google.com

user@thm:~$ nslookup website.thm
  
```

30

4. What is the IP address for the A record of www.website.thm?



Room progress (21%)

shops.myshopify.com

✓ Correct Answer

What is the value of the TXT record of website.thm?

THM{7012BBA60997F35A9516C2E16D2944FF}

✓ Correct Answer

What is the numerical priority value for the MX record?

30

✓ Correct Answer

What is the IP address for the A record of www.website.thm?

10.10.10.10

Check

How DNS Works

```

Address: 127.0.0.53#53

Non-authoritative answer:
website.thm text = "THM{7012BBA60997F35A9516C2E16D2944FF}"

user@thm:~$ nslookup --type=MX website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

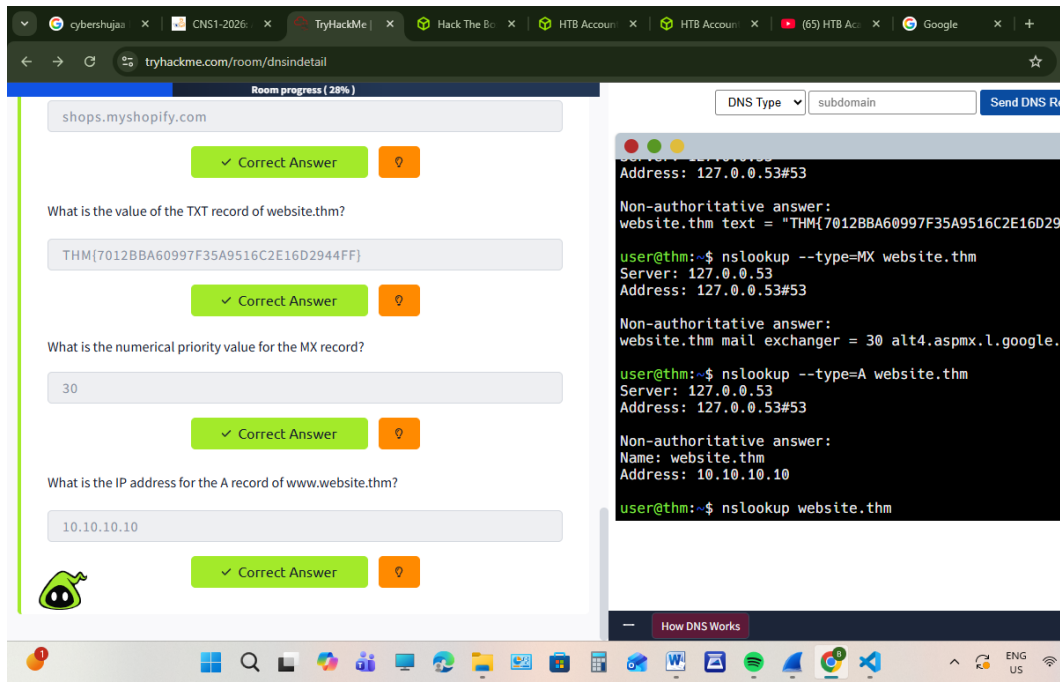
Non-authoritative answer:
website.thm mail exchanger = 30 alt4.aspmx.l.google.com

user@thm:~$ nslookup --type=A website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53

Non-authoritative answer:
Name: website.thm
Address: 10.10.10.10

user@thm:~$ nslookup website.thm
  
```

10.10.10.10



Room progress (28%)

shops.myshopify.com

✓ Correct Answer

What is the value of the TXT record of website.thm?

THM{7012BBA60997F35A9516C2E16D2944FF}

✓ Correct Answer

What is the numerical priority value for the MX record?

30

✓ Correct Answer

What is the IP address for the A record of www.website.thm?

10.10.10.10

✓ Correct Answer

Terminal output:

```
Address: 127.0.0.53#53
Non-authoritative answer:
website.thm text = "THM{7012BBA60997F35A9516C2E16D2944FF}"
user@thm:~$ nslookup --type=MX website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53
Non-authoritative answer:
website.thm mail exchanger = 30 alt4.aspmx.l.google.
user@thm:~$ nslookup --type=A website.thm
Server: 127.0.0.53
Address: 127.0.0.53#53
Non-authoritative answer:
Name: website.thm
Address: 10.10.10.10
user@thm:~$ nslookup website.thm
```

I have completed the module as shown above

The link to view the assignment

- <https://tryhackme.com/room/dnsindetail>

Conclusion

In conclusion the assignment enhanced the understanding of how the Domain Name System (DNS) works and its role in network communication. It demonstrated how domain names are resolved into IP addresses and highlighted the importance of DNS in ensuring efficient and secure network operations.