

Course: Cloud and Network Security-C1-2026

Cyber Shujaa Program

**Week 2: Assignment 2 HTB Academy:
Introduction to Network Traffic Analysis**

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Introduction

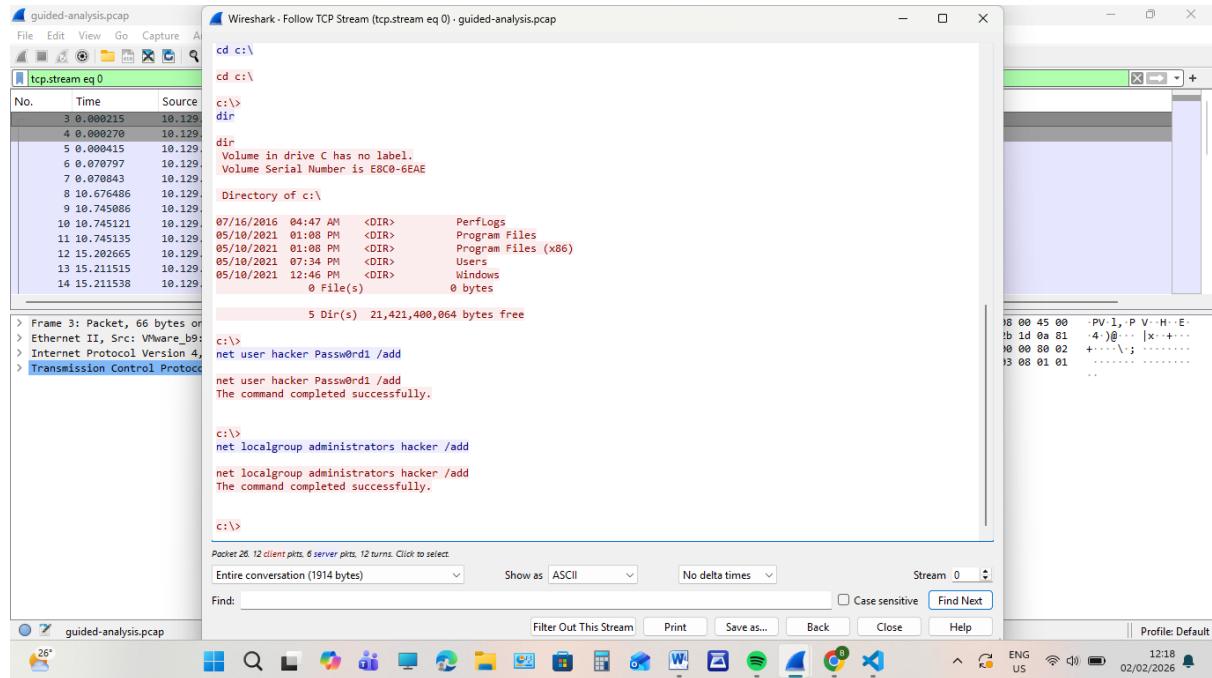
This assignment was carried out to help me develop a foundational understanding of network traffic, common network protocols and packet analysis techniques. The module introduces practical tools used to capture and analyse network traffic, enabling learners to observe real network behaviour.

Objectives

The objectives of the assignment were:

1. To understand the concept of network traffic analysis
2. To identify and understand common network protocols
3. To learn how to capture and analyse network traffic
4. To interpret packet data
5. To apply theoretical knowledge through practical exercises
6. To develop foundational skills in traffic monitoring and incident analysis

1. The name of the new user created on mrb3n's host



```

cd c:\

cd c:\>
dir
Volume in drive C has no label.
Volume Serial Number is E8C0-6EAE

Directory of c:\

07/16/2016 04:47 AM <DIR>    Perflogs
05/10/2021 01:08 PM <DIR>    Program Files
05/10/2021 01:08 PM <DIR>    Program Files (x86)
05/10/2021 07:34 PM <DIR>    Users
05/10/2021 12:46 PM <DIR>    Windows
          0 File(s)   0 bytes

5 Dir(s)  21,421,000,064 bytes free

c:\>
net user hacker Passw0rd1 /add
net user hacker Passw0rd1 /add
The command completed successfully.

c:\>
net localgroup administrators hacker /add
net localgroup administrators hacker /add
The command completed successfully.

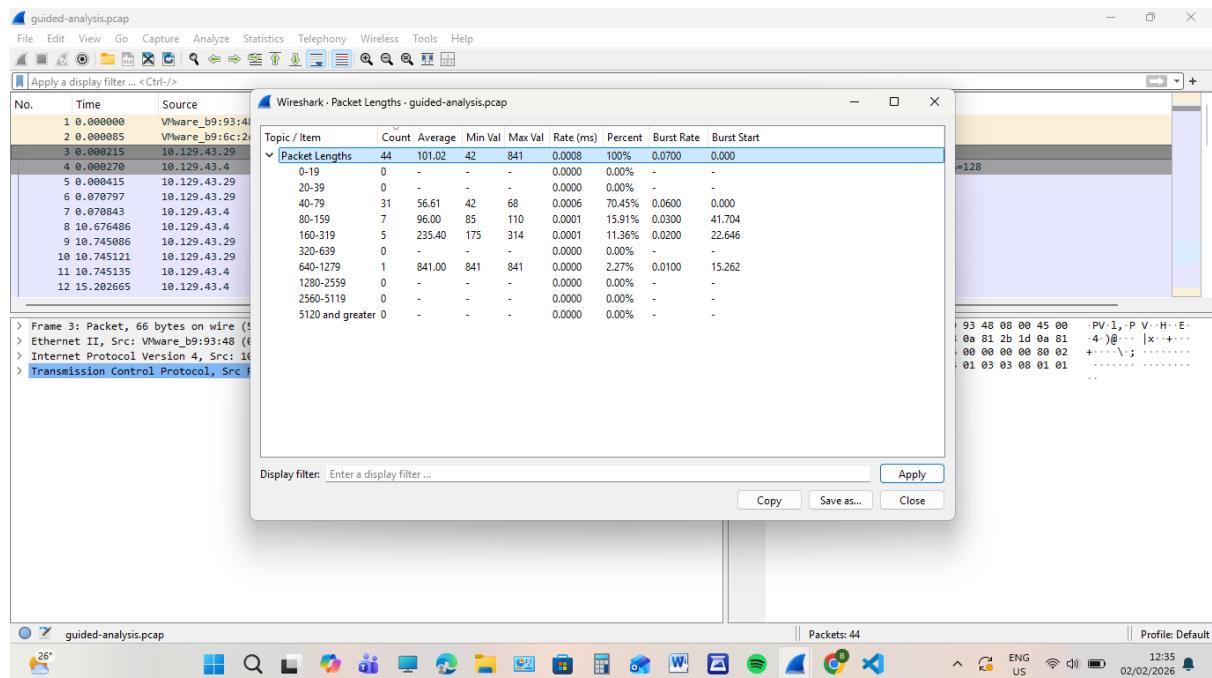
c:\>

Packet 26, 12 client ppts, 0 server ppts, 12 turns. Click to select.
Entire conversation (1914 bytes) Show as ASCII No delta times Stream 0 Find Next
Find: Filter Out This Stream Print Save as... Back Close Help || Profile: Default
ENG US 12:18 02/02/2026

```

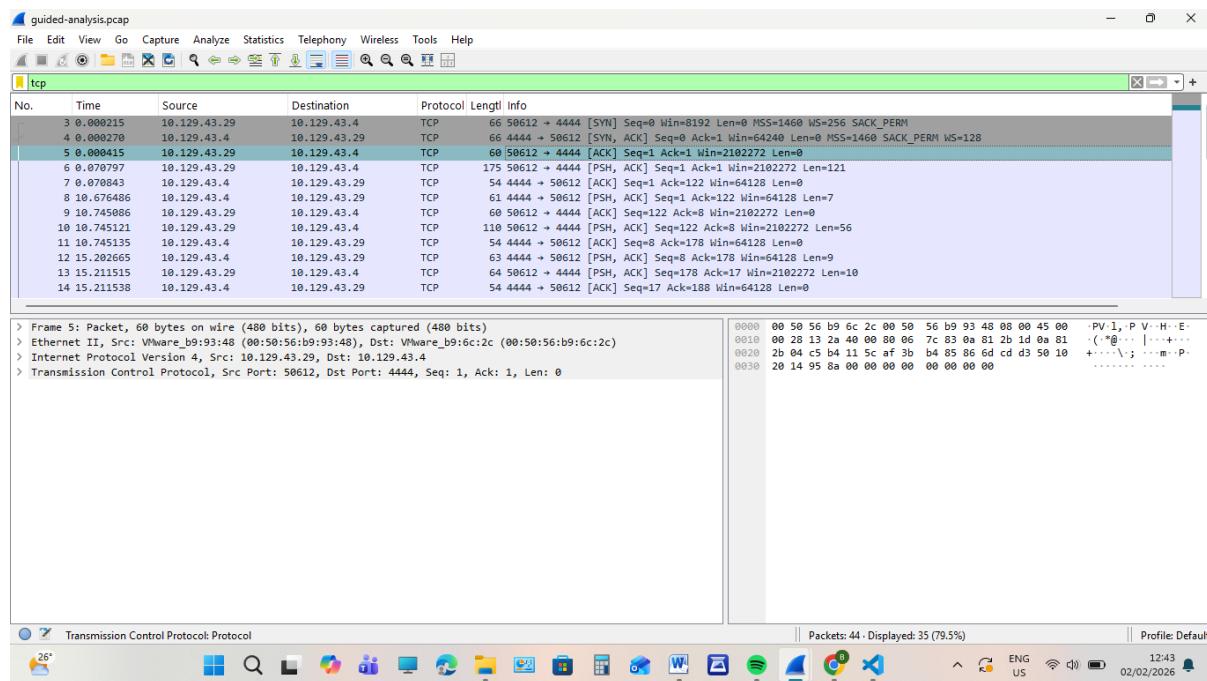
Then name of the user created in the user mrb3n's host is hacker

2. Total packets that were there in the Guided analysis PCAP



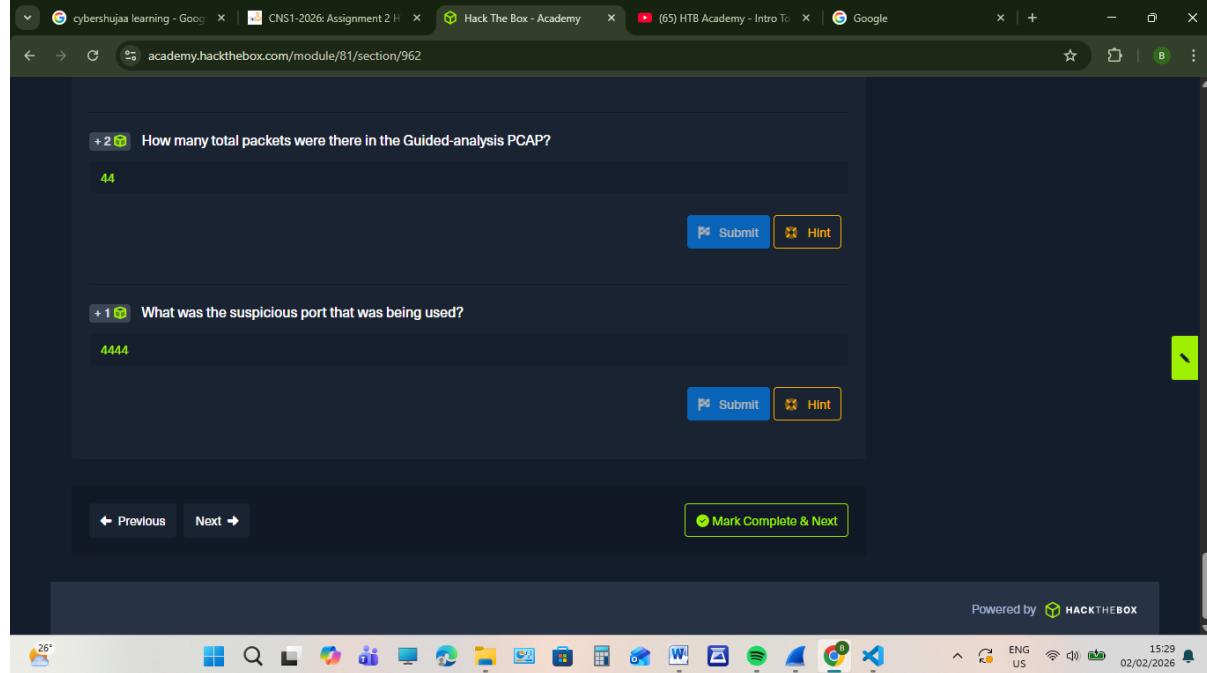
After click and know the number of packets I found out that were 44

3. The suspicious port that was being used



The suspicious port that was being used was 4444

- It uses the source port of 50612 but its star machine is connected to the server 10.129.43.4, so the server is listening on 4444 so that it can connect



The screenshot shows a web browser window with multiple tabs open. The main content area displays a challenge interface for "Hack The Box - Academy". It has two questions:

- How many total packets were there in the Guided-analysis PCAP?** (Answer: 44)
- What was the suspicious port that was being used?** (Answer: 4444)

Both answers are submitted successfully, indicated by green feedback messages. At the bottom, there are navigation buttons for "Previous" and "Next" and a "Mark Complete & Next" button.

I have completed the module as shown above

Here is the link for assignment

<https://academy.hackthebox.com/module/81/section/962>

Conclusion

This assignment provided a foundation understanding of network traffic analysis and its importance in cybersecurity. Through the HTB Academy Introduction to Network Traffic Analysis module, key concepts and practical skills for capturing and analysing network traffic were developed. The knowledge gained is essential for identifying abnormal network behaviour and supporting effective network security practices.