Christopher Smith
Assignment Example

Abstract

Examine network traffic to determine what information is exposed in transit. Sample traffic is generated and sent. The packets are observed and examined for content. The results demonstrate that all information sent is clear to read by an attacker.

Introduction

Kali Linux will be used in a VirtualBox Virtual machine. Netcat will be used to send and receive unencrypted data. Wireshark will be used for packet analysis.

Netcat listener commands used:

```
nc -l 127.0.0.1 -p 31337
```

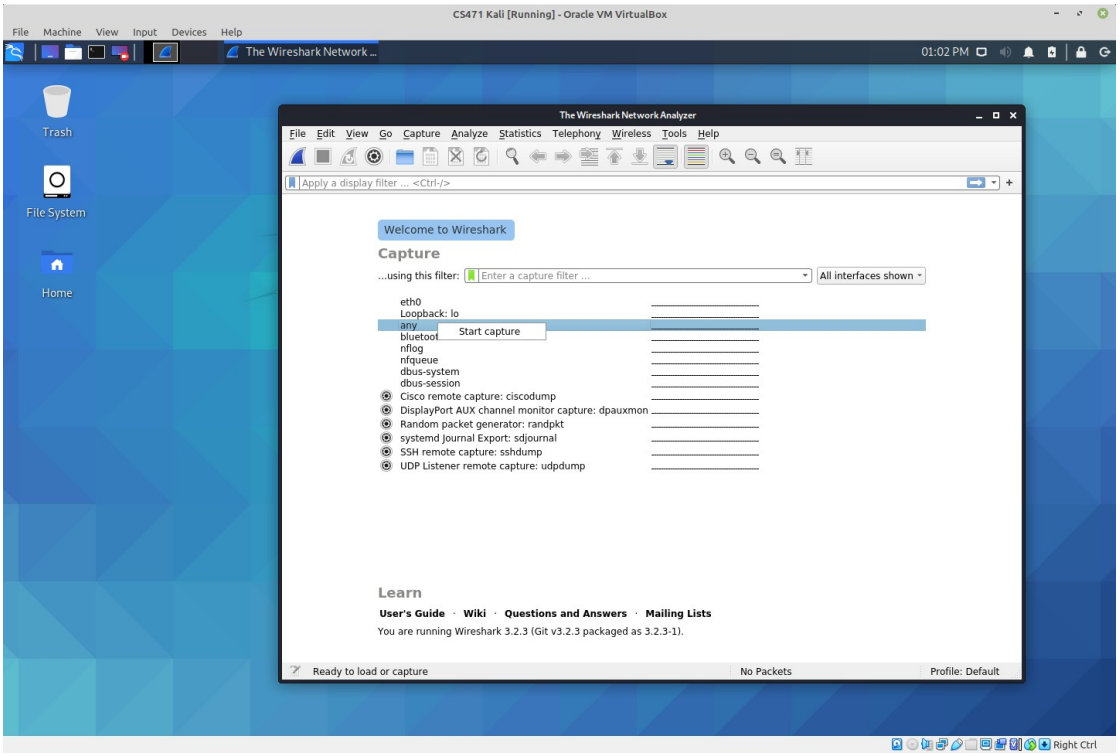
Netcat sender commands:

```
nc 127.0.0.1 -p 31337
```

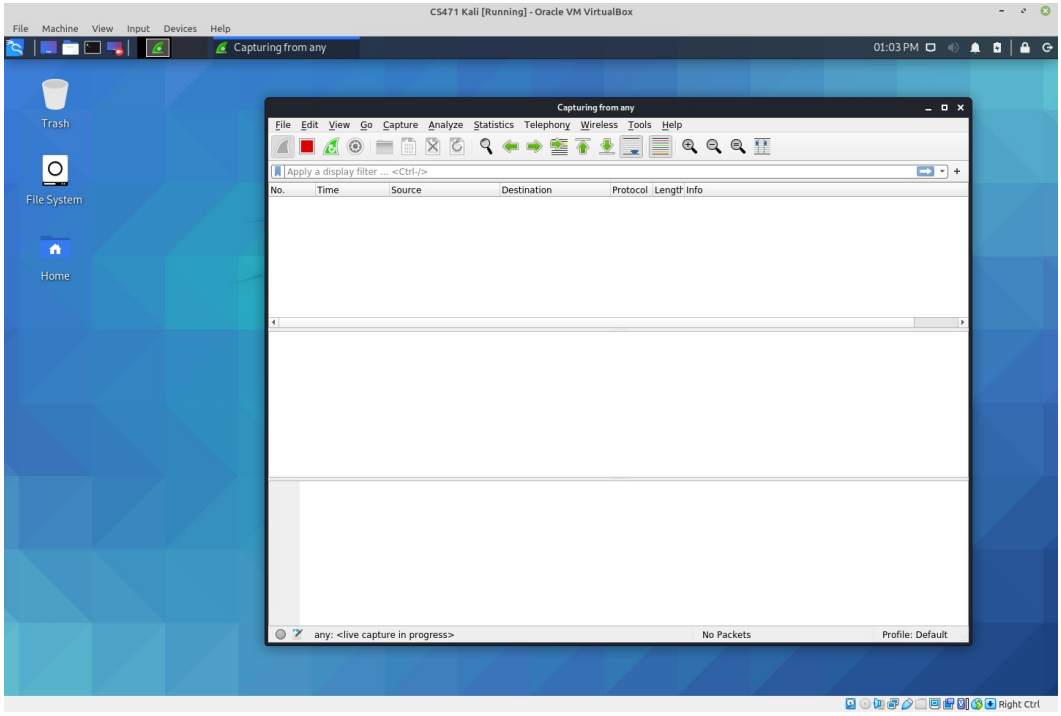
WireShark run as root while capturing on the ‘any’ adapter.

Summary of Results

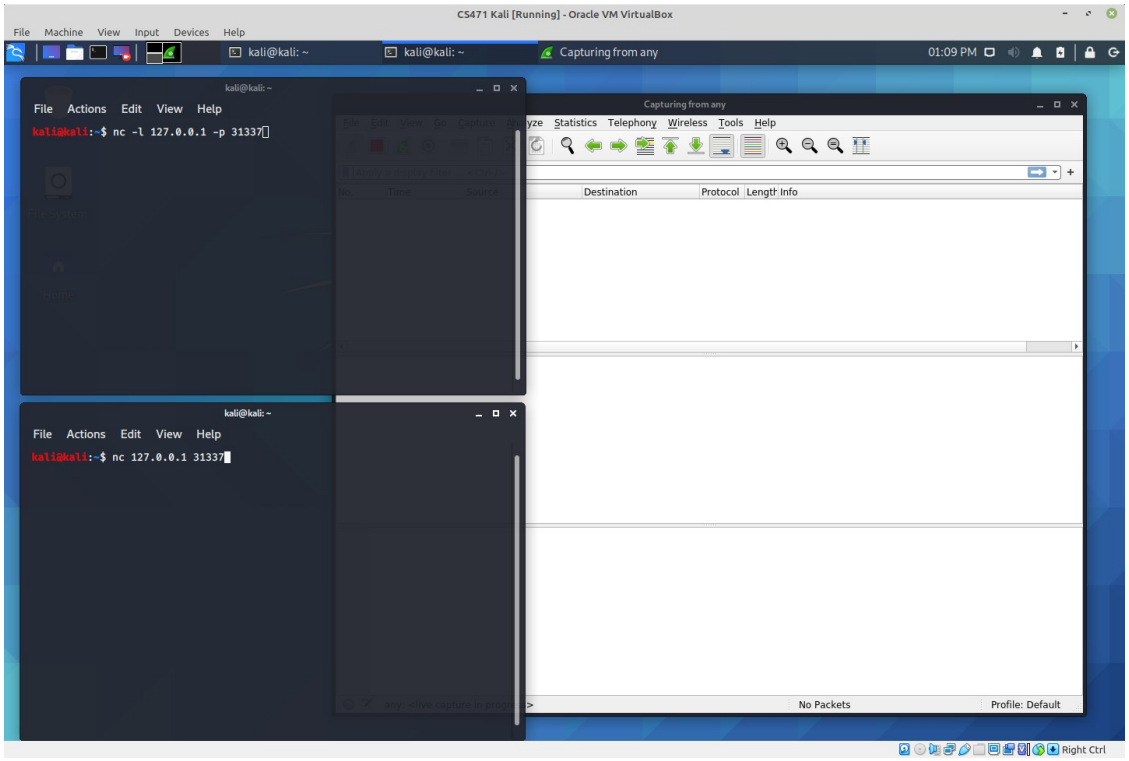
Starting WireShark in Kali Linux. Selecting the ‘any’ interface for packet capture.



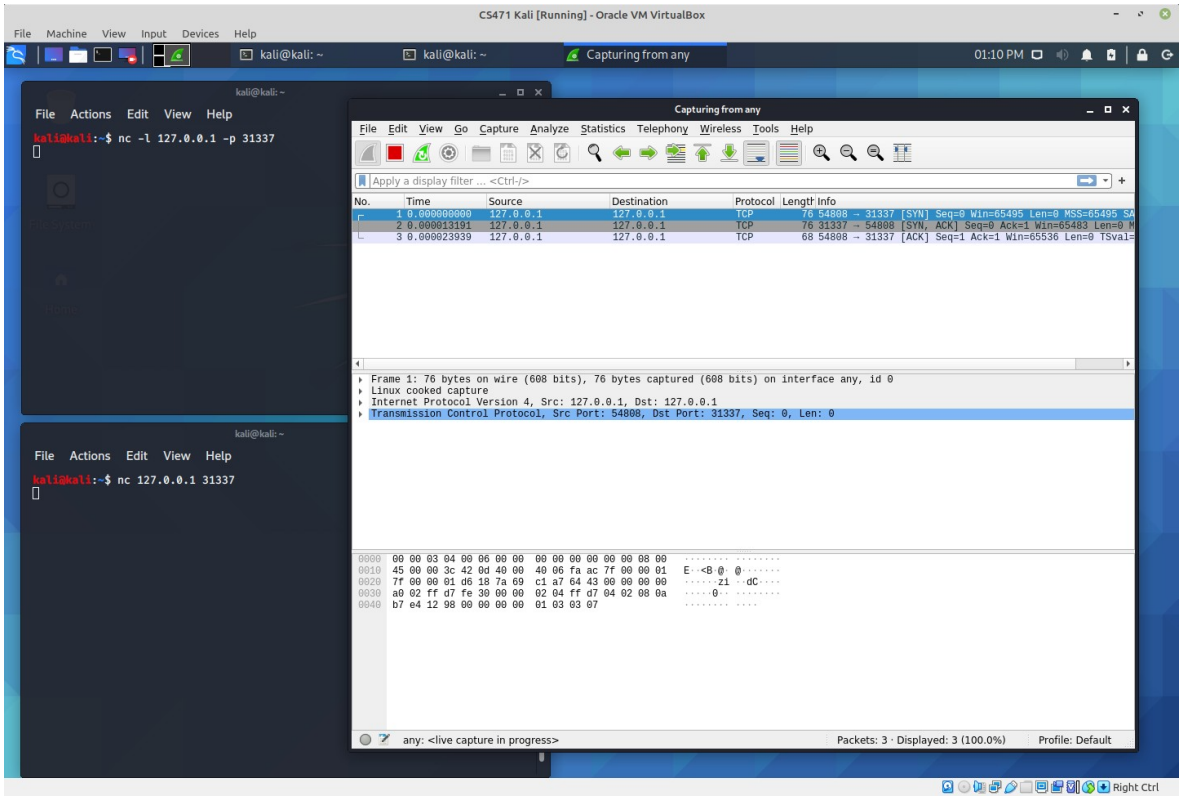
Now Wireshark is listening. No packets heard.



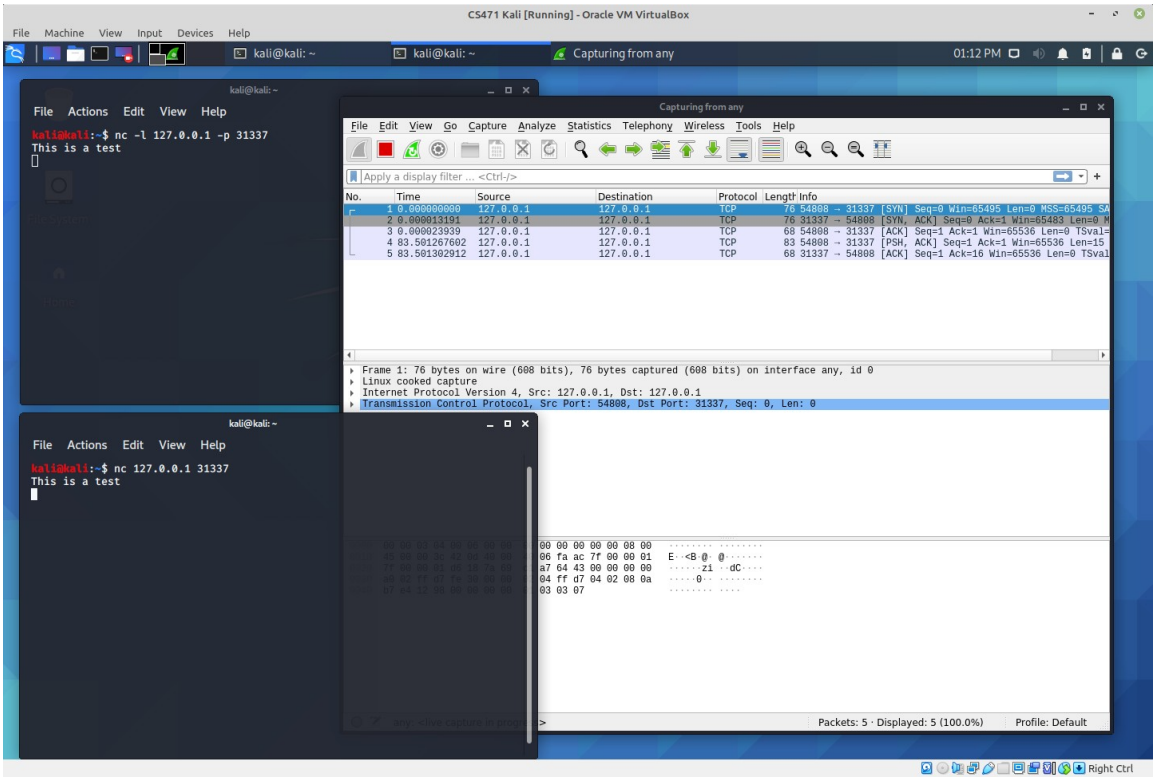
Next open two terminals. One as a netcat listener first, then another as a Netcat sender.



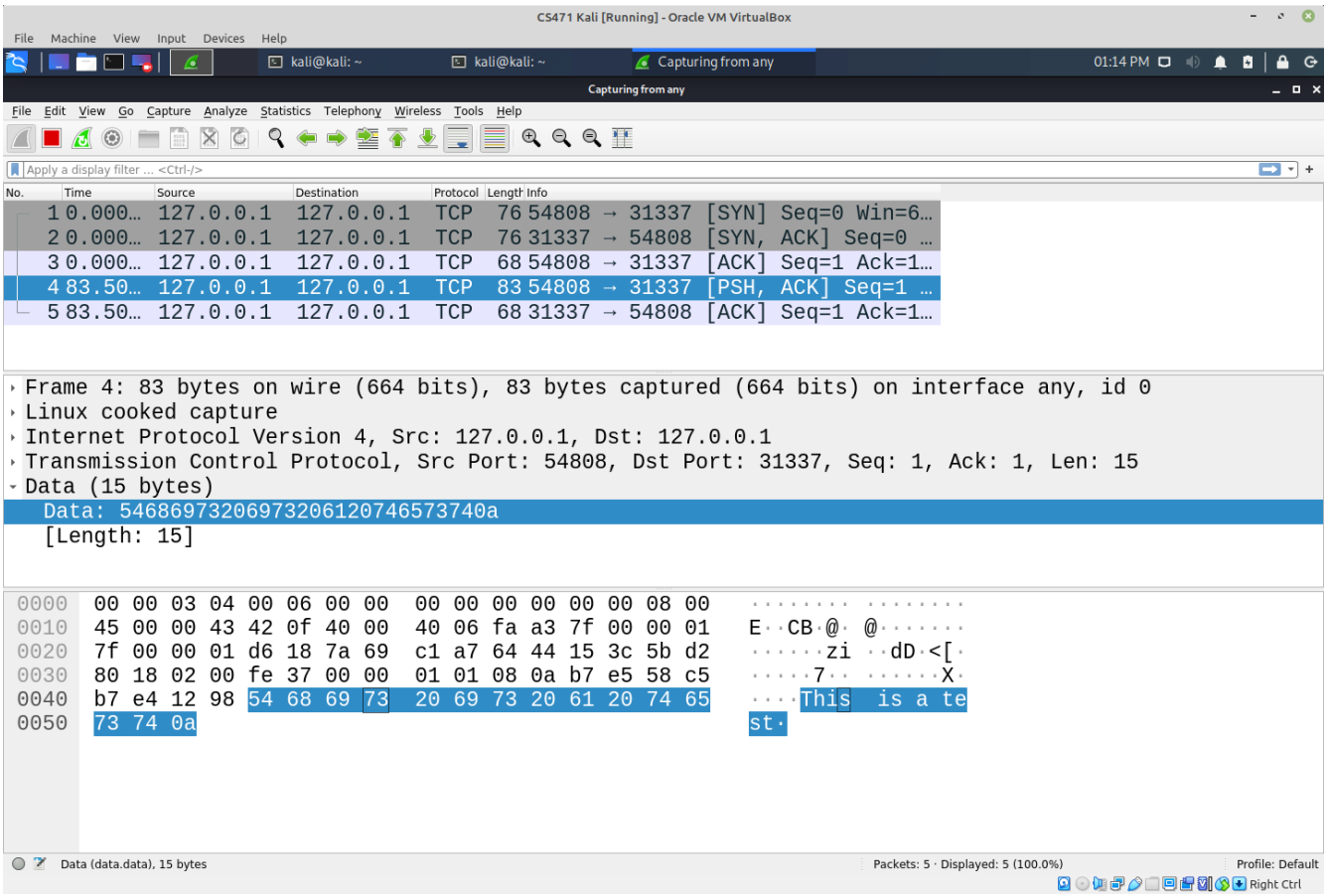
This reveals the TCP setup connection packets, but no intentional data has been sent.



Type some text into the sender terminal. Netcat sends this text to the listener over the network. Wireshark captures these packets also.



Notice the text sent over the network was found in the Wireshark capture. The text was easily intercepted and revealed.



Conclusion

Packets sent over the network are clear to read by any device that intercepts them. Additional measures are required to secure private information.

NOTE TO STUDENTS:

This is an example of the format to use when submitting assignments. Be sure to include more substance than this example.

Abstract: The abstract is a very short executive summary of the entire document. This includes result. 3-4 sentences only. This should clearly summarize the entire purpose and result of the document as succinctly as possible.

Introduction: This includes the tools used and any background information needed to understand your report.

Summary of Results: This includes your work in a *reproducible* way. Explain all of your work here. Include screenshots with descriptions. There should be more words here than pictures….

Conclusion: This should be a cogent explanation of the results. This should explain what the results imply and what the importance of this is. If prompted for a specific conclusion topic, include this, but do not exclude your explanation of results.

If specific questions are presented in the assignment description, answer them in the conclusion.

Last, try to avoid editorializing and using marketing jargon. Be clear and support your claims with results.