

EE379K Enterprise Network Security Lab 1

Report

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Part 1:

Step 1:

For step 1, the client and server in C were implemented to closely match the Python versions. For simplicity, the client sends the same hard coded message each time, similar to the Python client. The C client and server were tested with the Python client and server to ensure cross-functionality and that the client implementation in both languages worked almost identically. The only difference between the C client and Python client was the output of the Python client showing

```
From Server: b'INPUT LOWERCASE SENTENCE:'
```

and the C client shows

```
From Server: INPUT LOWERCASE SENTENCE:.
```

To build the server, compile it with: `gcc -o server server.c`.

Similarly for the client, compile it with: `gcc -o client client.c`.

To run them, simply execute either `./server` or `./client`.

Step 2:

For step 2, the DOS attack was implemented using a command line tool called `hping3` using the options

```
hping3 --count 15000 --syn --destport 12000  
--flood --rand-source 127.0.0.2
```

The tcpdump record of the DOS attack is in `output.pcap`.

Part 2: