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COMP 429

UDP Flood Tool - User Documentation

Abstract:
The following documentation will define the user input and protocol within our UDP Socket DOS Tool. We created two programs; one that acts as a server to handle UDP flood requests, the other as a client which the user can interact with to specify targets of UDP floods.

Input Format:
- To begin type in the location of the flood server, by typing the IP followed by the Port.
  > <FLOOD_IP> <FLOOD_PORT>

- This is followed by inputting the target you wish to flood, to specify this you enter the: IP followed by the Port.
  > <TARGET_IP> <TARGET_PORT>

- The user is then prompted with and the amount of packets he/she wishes to flood the target with. The user will enter a whole number.
  > <AMOUNT>

Request Format:
- Our client takes the user input described above and translates it into the actual request sent to the actual server at the address specified above. The actual format of the request message is as follows:
  > FLOOD <TARGET_IP> <TARGET_PORT> <AMOUNT>

Additional Information:
- Our program implements a method of detecting packet loss by having a timer that will resend the flood request after having not received a confirmation from flood.py after 2 seconds.
- The user should receive a notification from the server acknowledging that the server received the flood request.
- The user should also receive a notification from the server when the flood has completed; containing, the target information, amount of packets sent and the time it took to complete the flood.

Demonstration:
- The the purpose of being able to see a visual representation of the flood's impact on the system, we will flood a computer on which we can monitor the Ethernet traffic.
- We will also assume that the flood server is already running on (in our case) this is

IP:192.168.1.2 on Port: 9011.

1.) Enter the IP and Port of the Flood server.

```
What is the IP/port of the flood server?: 192.168.1.2 9011
```

2.) Enter the IP and Port of the Target.

```
What is the IP/port of the  target host?: 192.168.1.1 9010
```

3.) Enter the amount of packets you want to send.

```
How many packets?: 10000
```

4.) A successful UDP flood will result in the following output.

```
Request sent
Request received: target IP: 192.168.1.1 Port: 9010 Amount: 10000

Server response is:
Amount sent: 10000
Destination: IP = 192.168.1.1  port = 9010
Time: 1.111253261566162 seconds
```

- When viewing the Ethernet traffic on the target's computer we see a huge spike, this denotes the UDP flood in action.
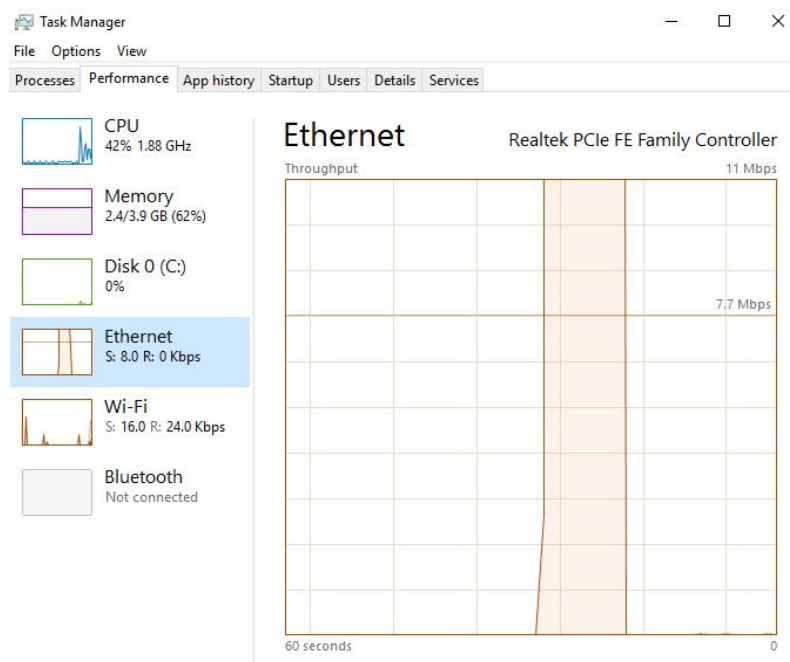
- Raw image of user interaction

```
Python 3.6.0 (v3.6.0:41df79263a11, Dec 23 2016, 08:06:12) [MSC v.1900 64 bit (AM
D64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
======== RESTART: E:\Classes\CS\COMP 429\Labs\UDP_Lab\flood_client.py ========
What is the IP/port of the flood server?: 192.168.1.2 9011
What is the IP/port of the  target host?: 192.168.1.1 9010
How many packets?: 10000
Request sent
Request received: target IP: 192.168.1.1 Port: 9010 Amount: 10000

Server response is:
Amount sent: 10000
Destination: IP = 192.168.1.1  port = 9010
Time: 1.111253261566162 seconds
>>>
```