

Screenshot of programs running

1. For 10 KB file (File name: file10KB.txt)

command line: `./client trig.sci.csueastbay.edu 50123 10000`

Hostname: trig.sci.csueastbay.edu

Port number: 50123

File size: 10000

- **Sending first packet of length 1000, Seq. No. 1**

[illegible]

- **Sending last packet of length 1000, Seq. No. 10**

2. For 20 KB file (File name: file20KB.txt)

command line: `./client trig.sci.csueastbay.edu 50123 20000`

Hostname: trig.sci.csueastbay.edu

Port number: 50123

File size: 20000

- **Sending first packet of length 1000, Seq. No. 1**

The screenshot displays two terminal windows side-by-side. The left window, titled 'qd6395@trig:~/socket', shows the execution of a C program 'server.c' which outputs: 'Socket has port #50123' and 'Sent packet of length : 1000'. The right window, titled 'unmesh@ubuntu: ~/Desktop/socket', shows the execution of a client program 'client' with arguments 'trig.sci.csueastbay.edu 50123 20000'. It reports 'Start time: 1455854191 520620' and shows two received packets, each of length 1000. The first packet's buffer data consists of 1000 'A' characters, and the second packet's buffer data consists of 1000 'B' characters.

- **Sending last packet of length 1000, Seq. No. 20**

```
q6395@trig:~/socket
[qd6395@trig socket]$ gcc -o server server.c
[qd6395@trig socket]$ ./server
Socket has port #50123
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
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Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
Sent packet of length : 1000
[qd6395@trig socket]$
```

```
unmesh@ubuntu: ~/Desktop/socket
Received packet: Seq No.: 20 & Length: 1000
Buffer data:
T
.....
Ending connection
unmesh@ubuntu: ~/Desktop/socket$
```


3. For 30 KB file (File name: file30KB.txt)

command line: `./client trig.sci.csueastbay.edu 50123 30000`

Hostname: trig.sci.csueastbay.edu

Port number: 50123

File size: 30000

- **Sending first packet of length 1000, Seq. No. 1**

[illegible]

- **Sending last packet of length 1000, Seq. No. 30**

[illegible]


```
command line: ./client trig.sci.csueastbay.edu 50123 40000
Hostname: trig.sci.csueastbay.edu
Port number: 50123
File size: 40000
```

- [illegible]

- The screenshot displays a Kali Linux desktop environment. On the left, a terminal window titled 'qd6395@trig:~/socket' shows a series of 'Sent packet of length : 1000' messages, followed by a prompt '[qd6395@trig socket]\$'. On the right, a virtual machine window titled 'Workstation' is open, showing a Ubuntu desktop. The terminal in the VM shows a prompt 'unmesh@ubuntu: ~/Desktop/socket', followed by a large block of 'M' characters, then 'Received packet: Seq No.: 40 & Length: 1000', then 'Buffer data:' followed by a large block of 'N' characters, and finally 'Ending connection' and a prompt 'unmesh@ubuntu: ~/Desktop/socket\$'.

5. For 50 KB file (File name: file50KB.txt)

command line: `./client trig.sci.csueastbay.edu 50123 50000`

Hostname: trig.sci.csueastbay.edu

Port number: 50123

File size: 50000

- Sending first packet of length 1000, Seq. No. 1

The image shows a Windows desktop environment. On the left, a terminal window titled 'qd6395@trig:~/socket' displays the output of a C program. The program sends 20 packets, each with a length of 1000, to a server at 50123. The output shows 'Sent packet of length : 1000' repeated 20 times. On the right, a VMware Workstation window shows a Linux virtual machine named 'unmesh' with the IP address 1455855066. The VM's terminal window shows the execution of a client program that receives packets from the server. The output shows 'Received packet: Seq No.: 1 & Length: 1000' and 'Buffer data:' followed by a long string of 'A' characters, indicating the received data.

- **Sending last packet of length 1000, Seq. No. 50**