

NetProg Assignment 2 Q2

1 Usage

```
make tftpserver
./tftpserver <port_number>
Sample use $ ./tftpserver 4873
```

Parameters:

port_number - port on which the server listens for connections

2 Implementation

Run an tftp server using the above command, after the server is running, make a connection with one or more tftp clients using the default linux client. To connect, type connect 127.0.0.1 <port_number> (if you are running the client and server on the same system). After that, you can request for any file by specifying the full path of the file in the server's local machine.

The tftp server responds to an RRQ by sending a DATA packet from a separate port, on which further communications take place. If the file requested does not exist or cannot be opened, the server sends an error of type 0, specifying that the file could not be opened. If the file exists, the server begins transmitting the file in blocks of size 512, and waits for an acknowledgement after sending each block. The server waits for an ACK for each packet, re-transmitting up to thrice with 5 second intervals, and closing the connection if no ACK is received even then. If an ACK is received the next DATA block is sent, and so on till all DATA is sent.