Test cases for TFTP

1)Transferring 2048 byte binary file

**A screenshot of a computer screen

Description automatically generated**

* In the above image, the server is running on the left window and the tftp linux client is running on the right window. A binary file of 2048 bytes is created and sent after the clients RRQ.
* The cmp command Is used to compare the server and client file and since the command returns without any error, we can confirm that both files match. The client file here is check.bin and server file is source\_file.bin.
* The stat command is used to verify the size of the file, as seen on the right

2)Transferring 2047 byte binary file

A screenshot of a computer

Description automatically generated

* Similar to part 1 , we have created a 2047 byte binary file and tested it being sent correctly to the tftp linux client.
* The file size was compared like part 1 and both the files were of the same size.

3) transfer a netascii file that includes two CR’s

A screenshot of a computer screen

Description automatically generated

* Here we have created a text file called input.txt and sent it to the client and renamed as cr.txt.
* Both files are compared similar to part 1 and 2 and since no return is detected from the command, they have been transmitted successfully.

4) Transfer a binary file of 34 MB

A screenshot of a computer

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In this part we have sent a merged pdf file of 46.86MB size. The block number would increment till 65535 and then start again from 0. This happened till the whole file was transmitted. Linux did not allow me to scroll up to where the block number resets but it can be tested and verified with a sample pdf file and linux tftp client.

5)Error message for file not found

A screenshot of a computer

Description automatically generated

As seen here, an error is printed on both client and server that file was not found.

6) Connect to the TFTP server with three clients

A screenshot of a computer

Description automatically generated

Here, the bottom left window is the server and the other 3 are clients. Each client gets a demo pdf file and the top left window verifies the successful transfer.

7) Terminate the TFTP client in the middle of a transfer

A screenshot of a computer

Description automatically generated

The timeout value is 10s. After 10 timeouts, the file transfer will terminate.

8)WRQ Features

A screenshot of a computer

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Both netascii and binary files have been sent from the tftp client to the server

A screenshot of a computer

Description automatically generated

Since the cmp command returns without errors, both the files match after transfer