

CSCI 558L – Laboratory Assignment #4B: Fast, Reliable File Transfer Tournament

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Due date: September 25, 2012 at 11:55pm

You will continue to develop the file transfer applications that you have completed in part 4A. You may either continue to develop one set of your application, merge both sets of applications developed by your team, or start over to come up with the best result.

All of the applications must run under FBSD8-STD OS image. You must compile and submit the executable binaries (if you are using some special libraries other than ones provided with the image, you will need to compile with statically linked libraries) and special instructions (if any) to the T.A. prior to the tournament. Test your application on a clean FBSD8-STD before the tournament time.

You will be given a script that will be used during the tournament. You must modify the interfaces for your final application to work correctly with the script. The result of the script will be the way your system will be evaluated. We suggest that you test your application against one of your older application.

You will be matched against other teams based on the state of your resulting applications on Thursday, September 20th. The tournament will place the applications from two teams through 100 Mbps, 200ms delay, and 20% packet loss link. Teams that yield higher throughput will be declared winners for each competition and be allowed to continue to compete against other winners. The top 4 winners will be competing against one another on Tuesday for the extra credit points.

You may use any and all sort of network methods to beat the other team, as long as it is not designed to trick the evaluators. The application must transfer a large file from one node to another using your application.

Other than the tournament, your application must achieve 40+ Mbps throughput for your team to receive full credit.

On September 25th, you are required to submit the following:

- (1) Source code for web page that introduces and describes the applications in detail.
- (2) Table that shows the throughput of FTP under different network condition, including that of traditional FTP server.
- (3) A link to the source code and instructions on how to compile and use the application.