CS2520 Project : Catalogue File

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Deliverable

1. SFTP - the folder that contains all the source code of the project.

2. make file of each of the components of the project is present in the folder SFTP.

3. "Config" a directory that contains the configuration file, sftp.conf to specify the below configurable items:

   Name server info file path

   Window size

   Time out

   Number of attempts

   MTU

   Inject error flag

   Probability of error

   Percentage of congestion

   Logical name for file server

   Path for statistical analysis log file

4. Place the "Config" folder at the desired directory, and update the full path "SFTP.h" header file in the source code.

5. "Experiments.xlsx" a document which contains the list of experiments run, steps followed and refers to the graph present in the final project report.

6. "StatAnalysisLog" a directory that contains the StatAnalysis.log file to capture the readings of the experiment conducted.

7. "Final Project Report" discusses the design and implementation of the SFTP protocol, test emulation, capturing the scenarios, performance and statistical analysis of the protocol used.

8. README file a document that contains the steps to run the application.

Assumptions and Limitations

1. Name server is set up before all the file servers are set up throughout.

2. Even for multiple name servers, it is assumed that all the name servers are set up before file servers are up.

3. Sync between the name servers is triggered only on the registration of file server.

4. If a name server is set up after a few file servers are registered with already available name server, those file server info are not updated in the new name server list.

5. *name_server_info.txt* is shared between all the components of the SFTP system.

6. ABORT command is not implemented.

7. All file servers provide same service to the client and same set of files are shared among the file servers on AFS.

8. Name server details are not deleted from the name server info file if the name server is DOWN. The file server and client try 3 times if not reachable connects to other name server.

9. File server details are also not deleted in the name server's list if that particular file server is DOWN, client tries 3 times if not reachable fetches new file server details from name server.

10. Window size in the configuration file denotes the maximum sequence number, window size at any particular time is maximum sequence number - 1.