



Simple File Transfer Protocol Project

06.05.2021

Sharma Umang
202012115

Overview

A simple version of File transfer protocol with pthread and corresponding clients, i have used signals and File IO and networking and threading to connect server with clients.

My project includes four commands that clients can do: ls, cd , upload file and download file.

- ls: list current directory (working directory of server process)
- cd: open directory
- download [filename] : download [filename] from current session directory at server to local
- upload [filename] : upload [filename] from local directory to current session directory at server

Goals

1. With the help of Networking, threading, signals and File IO the goal of this mini project is to help clients to download, upload and view files and directory. .

Requirements

Ls command

- It would return Files and directories.
- Directory in which the file has compiled that directory would be his root directory.

Cd Command

- Directory should exist in root directory, if not it will return error
- To change it cd [directory_name].

To Download a File

- File can be created by Download
- If File Already exists you can download the file.
- To download file: download [filename].

To upload files

- File should already exist, if not error would return.
- To upload file : upload [filename].

Assumption

- **MAX_CLIENT = 20**

Server can handle at most 20 clients

- **Single Server, Concurrent Clients.**

Server will be listening until you terminate or close terminal and client can terminate by exit command

- **Ls command does not work with switches**

You can only command ls for the result in client.