CS 518 Assignment : Remote Files

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Intro to the code:

Server side has an array of client-file mappings. This array is indexed by the netfd (generated on a netopen() call). Values of netfd are always negative and keep on decrementing, starting from -90. This array of client-file mappings has a custom defined structure('file_details') as elements. This structure saves the file pathname, mode and file pointer.

To handle every client connection, a new thread is created. Depending on the parameters of the client call, specific functions are executed and the output is sent back to respective clients.

Server port is fixed at 10000.

On the client side, netserverinit() resolves hostname to an IP address.

Messages are exchanged between the server and the client in form of strings. These strings are delimited by commas(','). String tokenizing is used to find out the parameters needed to either execute a function on the server or to reflect some output on the client side.

Extension A has been implemented as part of the project.

Instructions to run the code:

We ran the server code in java.cs.rutgers.edu and the client file in atlas.cs.rutgers.edu

We have put the files separately in two different folders each has been provided with a makefile.

To run the client code, upload it the folder to the required ilab machine and run the following two commands.

```
make
./demo.out
```

To run the server code, upload it to the required ilab machine and run the following two commands.

```
make
./server.out
```

The libnetfiles.c also has some demo code built into it.