

Test Cases

- 1) Start client without server running.

Expect:

Error - Index Server not bound. Please start index server before launching client.

Result:

Error - Index Server not bound. Please start index server before launching client.

OK

- 2) Start server and make sure it's running.

Expect:

Server running...

Enter 0 to exit:

Result:

Server running...

Enter 0 to exit:

OK

- 3) Start second server instance to test bounding.

Expect:

Error - Server is already bound.

Result:

Error - Server is already bound.

OK

- 4) Start client with no id.

Expect:

Please enter a peer id as a command line argument

Result:

Please enter a peer id as a command line argument

OK

- 5) Start client with a unique id (1).

Expect:

ClientServer running...PeerID = 1

of files registered: 5

PeerID: 1

Options:

1 - Search for filename

2 - Obtain filename from peer

3 - List files in shared directory

4 - Exit

:

Result:

ClientServer running...PeerID = 1

of files registered: 5

PeerID: 1

Options:

1 - Search for filename

2 - Obtain filename from peer

3 - List files in shared directory

4 - Exit

:

OK

- 6) Start client with same id (already bound).

Expect:

Error - Peer 1 is already bound. Please choose a different peer id or restart rmiregistry

Result:

Error - Peer 1 is already bound. Please choose a different peer id or restart rmiregistry

OK

- 7) Check that client registers files with index (Client1 example folder).

Exit Client 1 if running.

Copy files text1000.txt and text2000.txt from textfiles folder into Client1 folder.

Start Client 1

Choose option 1 and enter text1000.txt as filename.

Search for file ...

Expect:

The following peers have the file (text1000.txt) :

1

Result:

The following peers have the file (text1000.txt) :

1

OK

Choose option 1 and enter text2000.txt as filename.

Expect:

The following peers have the file (text2000.txt) :

1

Result:

The following peers have the file (text2000.txt) :

1

OK

8) Search for file that does not exist (file).

Expect:

No peers appear to be sharing file (file)

Result:

No peers appear to be sharing file (file)

OK

9) Search for file that exists on multiple clients.

Start a second client and exit.

Copy file text1000.txt from directory textfiles to Client2 (example) directory.

Start second client again.

Choose option 1 and enter text1000.txt as a filename.

Expect:

The following peers have the file (text1000.txt) :

1

2

Result:

The following peers have the file (text1000.txt) :

1

2

OK

10) Attempt to obtain file that doesn't exist.

Choose option 1 and enter "file1" as filename.

Expect:

Error - Invalid filename for specified peer. Please enter valid filename

Result:

Error - Invalid filename for specified peer. Please enter valid filename

OK

11) Attempt to obtain file from non-existent peer.

From client 2 choose option 2 and attempt to obtain arbitrary file from a peer that isn't running

(3 for example)

Expect:

Error - Invalid peer entered. Please enter valid peer

Result:

Error - Invalid peer entered. Please enter valid peer

OK

12) Obtain file and check if it's in the shared directory and registry.

From client 2 choose option 2 and attempt to obtain file text2000.txt from Client 1

Expect:

display file text2000.txt

(and file is in Client2's folder)

Result:

display file text2000.txt

(file is indeed in Client2's folder)

OK

13) List files when directory is empty.

Exit clients and server. Restart server.

Delete all files from Client2's directory.

Start Client2 again and choose option 3

Expect:

Files in shared directory:

Result:

Files in shared directory:

OK

14) List files when there are files in the shared directory.

Start Client 1 again (don't delete its files)

Choose option 3

Expect:

Files in shared directory:

text2000.txt

text1000.txt

Result:

Files in shared directory:

text2000.txt

text1000.txt

OK