

Danutella Verification

The following tests were performed, with the results and correctness shown:

Test	Result	Correct?
Get a file when only the origin server has it	Broadcast query message and receive download via Origin Server	YES
Get a file that has been replicated across multiple servers	Receive the file from the closest server and ignore hitQueries from other peer.	YES
Get a file that is expired on certain peers	Peers with expired-TTR files do not send back hitqueries	YES
Get a file that is invalid	Peers with invalidated files do not send back hitqueries	YES
Listing files that are invalid	Only files from other peers that are old are shown as invalid	YES
Listing files to see which are owned by me	Shows +++ to indicate this file is owned by you	YES
Editing a file in push mode	Sends invalidation message that invalidates the file in other peers	YES
Editing a file in pull mode	Changes version number only	YES
Editing a file that isn't yours	Not allowed (error message shows up)	YES
Refreshing when you have invalid files	Redownloads them straight from the origin server	YES
Polling the origin server for a still-valid file	Updates the file's TTR	YES
Polling the origin server for an invalid file	Invalidates DanFile	YES

Sending multiple messages on the network	All messages are kept in order, no dropped or forgotten queries and proper back-channels are established via associative array	YES
Downloading a file from a peer that is offline	Prints an error message	YES?
Polling for a file whose origin is offline	Prints an error message	YES?

Note that the last few tests are not ordinary at all because this is a statically allocated network and all peers are on the same machine, expected to be up.