Files are split up into PACKET_SIZE chunks sequentially numbered from 0 to PACKET_IND_LIMIT. FRAME_SIZE of these packets are grouped together and sent at once. The server itself stores a WINDOW_SIZE amount of packets in a circular buffer. When the client receives a frame's worth of packets, it sends the index of the last packet it received followed by the filename requested in the payload field. The server responds by sending the next frames worth of data starting with the packet after the one specified by the client. If the server hits end of file it sends a frame's worth of zeroes.

Packet Index (char)

PACKET_SIZE

Packet:

Payload

FRAME_SIZE * (PACKET_SIZE + 1)

Frame:

WINDOW_SIZE * (PACKET_SIZE + 1)

Window