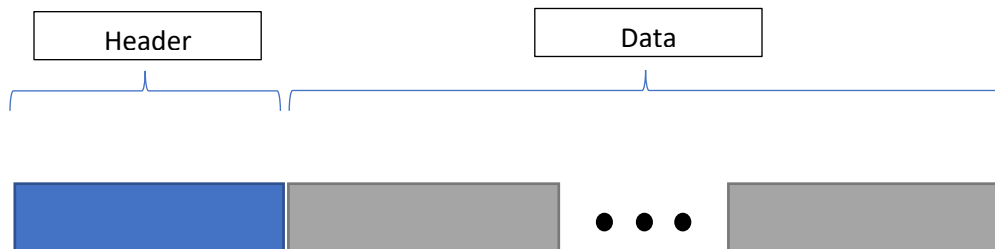Steven Steele

Alex Vidal

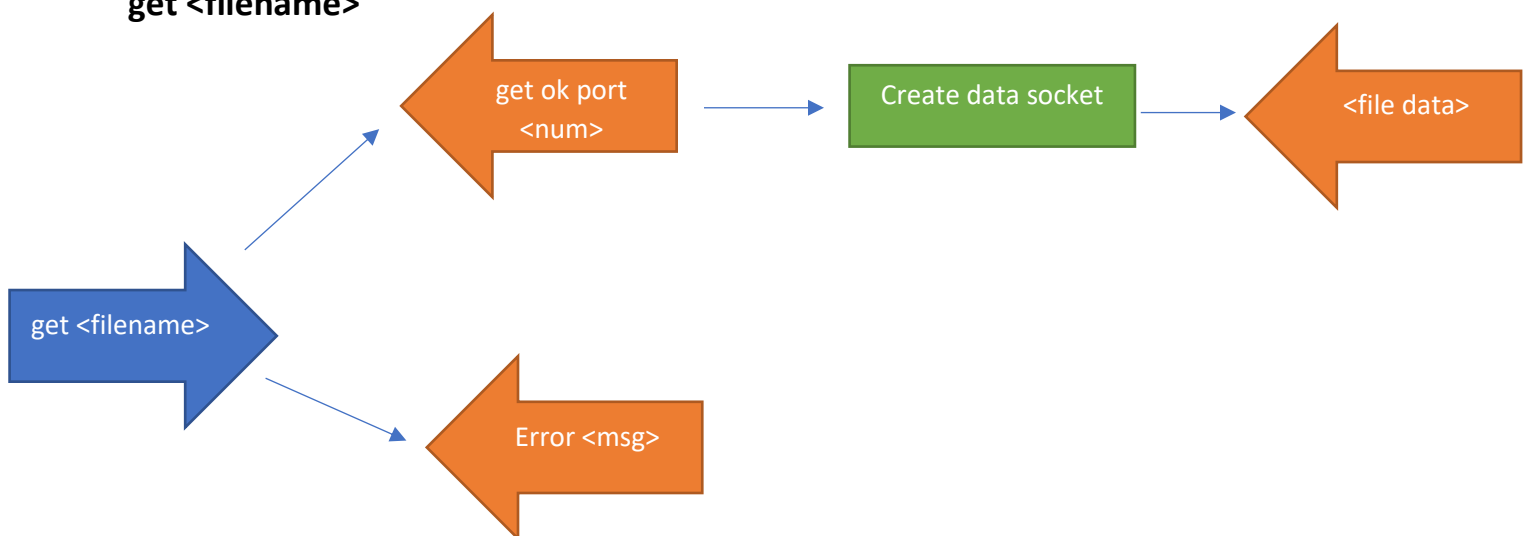# CPSC 471 File Transfer Protocol Design

General

For each packet sent between the client and the server, whether in the command channel or the data channel, there will be a 10 byte header which, when read as decimal string, indicates the size of the subsequent message.

Right-facing blue arrows indicate the client sending a message or data, left-facing orange arrows indicate the server sending a message or data.
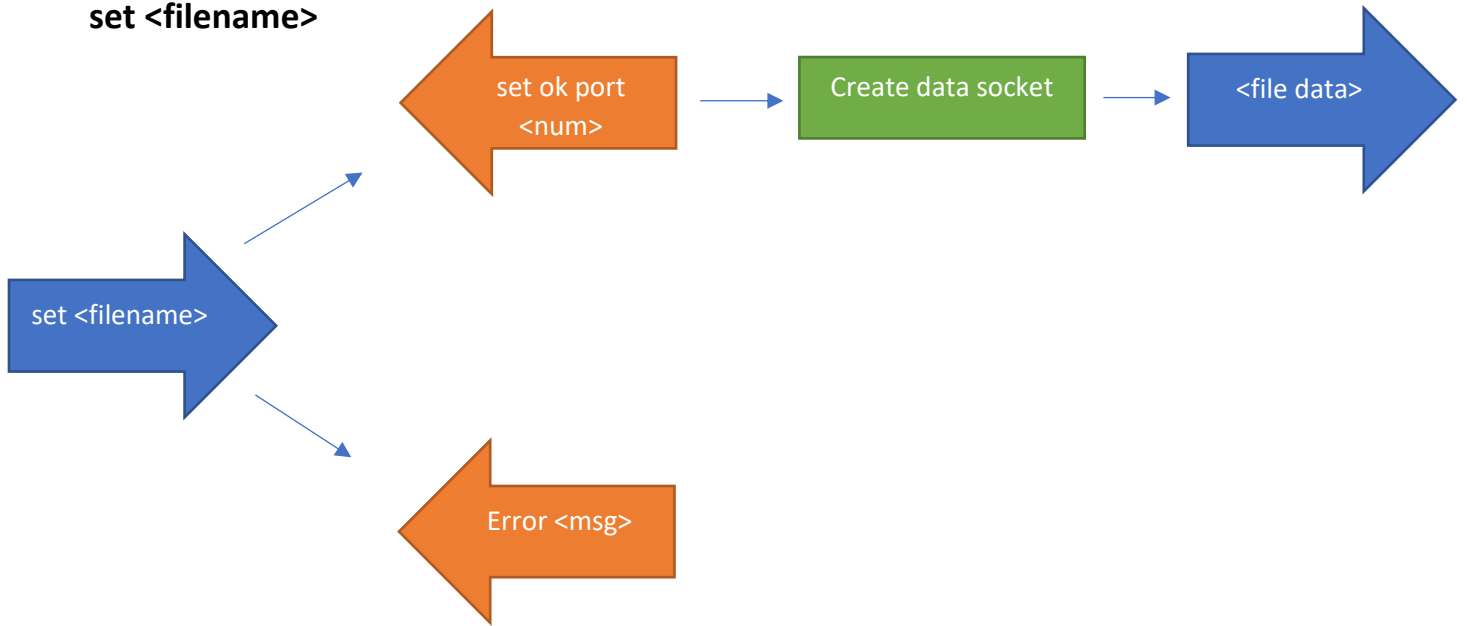
In the case of ls, get, and set, the server will create a new socket on an ephemeral port to send data across and sends that port number to the client. Once a connection has been established on the new data socket, the data is transferred. Once the transfer is complete the data socket is closed.
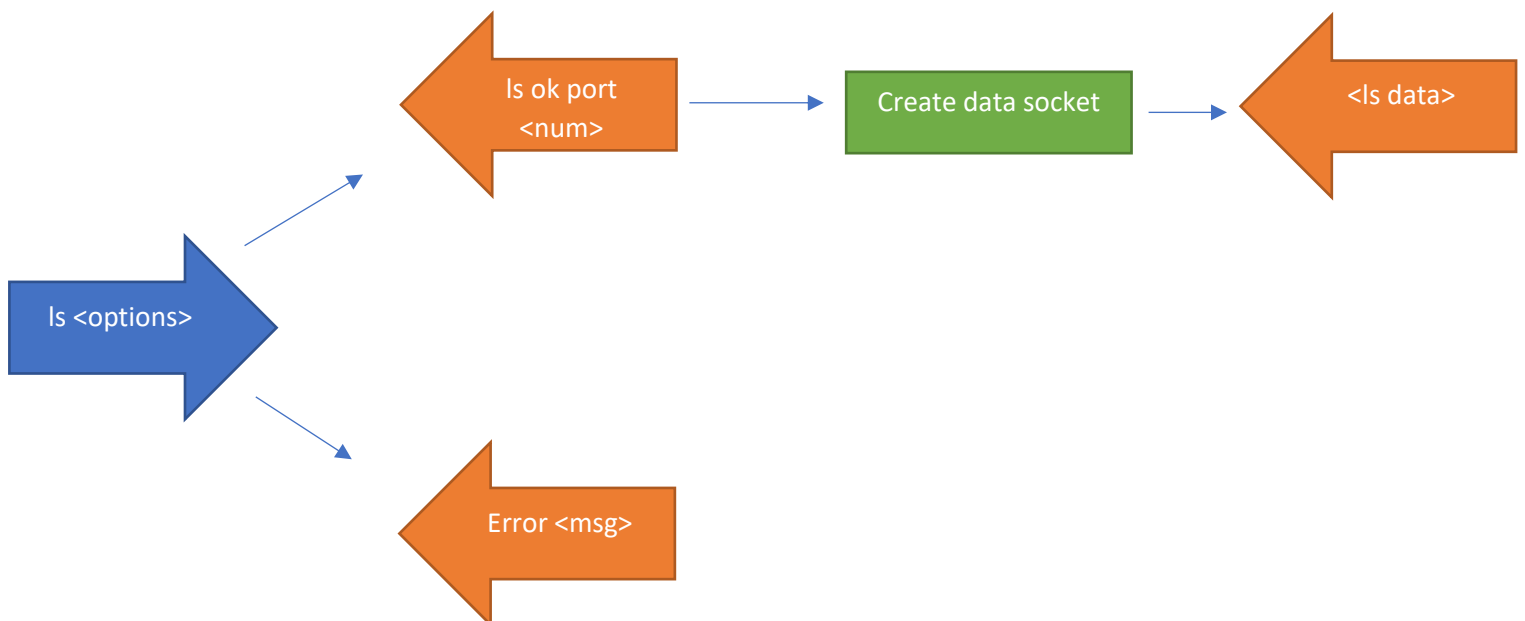

get <filename>

set <filename>

set <filename> → set ok port <num> → Create data socket → <file data>

set <filename> → Error <msg>

ls <options>

ls <options> → ls ok port <num> → Create data socket → <ls data>

ls <options> → Error <msg>

quit

quit → quit ok → Close sockets