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CPSC 471 File Transfer Protocol Design

**General**

For each packet sent from server to client or vice versa there will be a 4 byte header which, when read as a 32 bit integer, 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

Data

Header

**Control Messages**

get <file>

ethereal port

get ok

FTP exchange

get <filename>

get file not found

error

set <file>

ethereal port

error

set ok

set <filename>

FTP exchange

ls

ethereal port

error

ls ok

ls

FTP exchange

quit

quit

quit ok

Close sockets

**File Transfer Messages**

Header

Data

Once an FTP exchange has been agreed to via control and the ethereal port set up, communication is done similar to command messages. The first 4 bytes of the message are a header which indicate how many bytes remain in the message.