

## Ctcp\_receive()

- buffer into rx-segments - buffered.
- Call Ctcp\_output in ctcp timer.

## Ctcp\_read()

- Read in chunks of sizes at max → MAX\_SEG\_DATA\_SIZE
- Create segments and buffer into tx-segments-unacked.
- Set tx\_eof flag if EOF is received.

## Ctcp\_timer()

- Flush all waiting segments in the tx-segments-unacked buffer.
- Flush all received segments into STDOUT using conn\_output.

When we get EOF →

- Flush the pending segments to be sent.
- Send FIN.
- WAIT FOR FIN & output if more segments are received from the other side.

When we get FIN →

- Flush output to STDOUT
- Send EOF to stdout using `conn_output(state, "", 0)`
- Send the segments read from STDIN and wait till we receive EOF from STDIN before sending FIN.

When we get ACK

Remove the segments we have in the buffer ~~tx-segments-unacked~~ whose seqno. of the last data byte is less than the ACKNO.