| Command<br>(English) | Command<br>(DUMB<br>protocol) | description   | client to server<br>(English) | client to<br>server<br>(DUMB<br>protocol) | server to client (DUMB protocol) (success) | server to client (DUMB protocol) (exists) | server to client (DUMB protocol) (no such box) | server to client (DUMB protocol) (open box) statcode 3 | server to client (DUMB protocol) (empty) | server to client  (DUMB protocol)  (not open)  statcode 5 | server to client (DUMB protocol) (not empty) | server to client (DUMB protocol) (bad syntax) |
|----------------------|-------------------------------|---|-------------------------------|---|--|---|--|--|--|---|--|---|
| start                | HELLO                         | Initiate session with DUMB server   | start                         | HELLO                                     | HELLO dumbv0 ready!                        | -   | -  | -  | -  | -   | -  | WHAT?   |
| quit                 | GDBYE                         | Stop session with DUMB server   | quit                          | GDBYE                                     | (no reply)                                 | -   | -  | -  | -  | -   | -  | WHAT?   |
| create               | CREAT                         | Create a new user/message box name on the DUMB server                                   | create mybox                  | CREAT mybox                               | OK!  | EXIST                                     | -  | -  | -  | -   | -  | WHAT?   |
| open                 | OPNBX                         | Open an existing user/message box name on the DUMB server                               | open mybox                    | OPEN mybox                                | OK!  | -   | NEXST  | OPEND  | -  | -   | -  | WHAT?   |
| next                 | NXTMG                         | Get the next message from the currently open message box                                | next                          | NXTMG                                     | NXTMG!5!hello                              | -   | -  | -  | EMPTY                                    | NOOPN   | -  | WHAT?   |
| put                  | PUTMG                         | Put a message in to the currently open message box                                      | put hello                     | PUTMG!5!<br>hello                         | OK!5                                       | -   | -  | -  | -  | NOOPN   | -  | WHAT?   |
| delete               | DELBX                         | Delete a user/message box name on the DUMB server                                       | delete mybox                  | DELBX mybox                               | OK!  | -   | NEXST  | OPEND  | _  | -   | NOTMT  | WHAT?   |
| close                | CLSBX                         | Close the user/message box<br>name on the DUMB server that<br>was opened by the client. | close mybox                   | CLSBX mybox                               | OK!  | -   | -  | -  | -  | NOOPN   | -  | WHAT?   |
| help                 | USAGE                         | See help menu of all available<br>English commands                                      | help                          | USAGE                                     | OK!  | -   | -  | -  | -  | -   | -  | WHAT?   |
| (invalid<br>input)   | ERROR                         | Used for malformed English messages   | (none of the above)           | ERROR                                     | WHAT?                                      | -   | -  | -  | -  | -   |  | -   |

| Command<br>(English) | Client-side<br>prompt for<br>argument  | Example<br>argument | Condition   | Client-side<br>reply<br>(server reports<br>OK!)   | Client-side<br>reply<br>(server reports<br>EXIST) | Client-side<br>reply<br>(server reports<br>NEXST) | Client-side<br>reply<br>(server reports<br>OPEND) | Client-side<br>reply<br>(server reports<br>EMPTY) | Client-side<br>reply<br>(server reports<br>NOOPN)                                | Client-side reply (server reports NOTMT) | Client-side<br>reply<br>(server reports<br>WHAT?)  |
|----------------------|--|---------------------|---|---|---|---|---|---|--|--|--|
|                      |  |                     |   | Command<br>successfully<br>fulfilled  | Message box<br>already exists                     | Message box does not exist                        | Message box is open                               | Message box is<br>empty                           | Message box is not open  | Message box is not empty                 | Malformed<br>message sent<br>from client   |
|                      |  |                     |   | statcode 0  | statcode 1  | statcode 2  | statcode 3  | statcode 4  | statcode 5   | statcode 6                               | statcode 7   |
| start                | Client successfully connected to [hostname, ip addr] via [port nuimber].  Type "start" (without quotation marks) and hit the RETURN key to initialize the DUMBv0 client. | -                   | Directions<br>must be<br>followed as<br>stated in the<br>prompt.  | Welcome to<br>DUMBv0 client!<br>[print usage<br>menu]                                       | -   | -   | -   | -   | -  | -  | Try again.  Type "start" (without quotation marks) and hit the RETURN key to initialize the DUMBv0 client. |
| quit                 | -  | -                   | -   | Success! Client<br>connection is<br>now closed.<br>Thank you for<br>using DUMBv0<br>client! | -   | -   | -   | -   | -  | -  | -  |
| create               | Okay, what<br>would you like<br>to name your<br>message box?   | mybox               | The argument must be 5-25 chars. long and start with [Aa-Zz] The argument must not refer to an existing message box.              | Success!<br>Message box<br>'mybox' was<br>created.  | Error. Message<br>box 'mybox'<br>already exists.  | -   | -   | -   | -  | -  | Error. Command<br>was<br>unsuccessful,<br>please try again.  |
| open                 | Okay, open<br>which message<br>box?  | mybox               | The argument must be 5-25 chars. long and start with [Aa-Zz] The argument must refer to an existing message box that is not open. | Success!<br>Message box<br>'mybox' was<br>opened.   | -   | Error. Message<br>box 'mybox'<br>does not exist.  | Error. Message<br>box 'mybox' is<br>already open. | -   | -  | -  | Error. Command<br>was<br>unsuccessful,<br>please try again.  |
| next                 | -  | -                   | A message<br>box must be<br>open, and<br>have at least<br>one<br>message.   | Success! The<br>next message<br>was retrieved,<br>and it says:<br>"hello"                   | -   | -   | -   | Error. Message<br>box 'mybox' is<br>empty.        | Error. A<br>message box<br>must be open in<br>order to retrieve<br>its messages. | -  | -  |

| Command<br>(English) | Client-side<br>prompt for<br>argument                   | Example<br>argument | Condition  | Client-side<br>reply<br>(server reports<br>0K!)<br>Command<br>successfully<br>fulfilled<br>statcode 0 | Client-side<br>reply<br>(server reports<br>EXIST)<br>Message box<br>already exists<br>statcode 1 | Client-side<br>reply<br>(server reports<br>NEXST)<br>Message box<br>does not exist<br>statcode 2 | Client-side<br>reply<br>(server reports<br>OPEND)<br>Message box is<br>open<br>statcode 3        | Client-side<br>reply<br>(server reports<br>EMPTY)<br>Message box is<br>empty<br>statcode 4 | Client-side<br>reply<br>(server reports<br>NOOPN)<br>Message box is<br>not open<br>statcode 5 | Client-side<br>reply<br>(server reports<br>NOTMT)<br>Message box is<br>not empty<br>statcode 6   | Client-side<br>reply<br>(server reports<br>WHAT?)<br>Malformed<br>message sent<br>from client<br>statcode 7 |
|----------------------|---|---------------------|--|---|--|--|--|--|---|--|---|
| put                  | Okay, what<br>would you like<br>your message to<br>say? | hello               | A message<br>box must be<br>open.  | Success! Your<br>message,<br>"hello", was<br>pushed to<br>'mybox'.                                    | -  | -  | -  | -  | Error. A<br>message box<br>must be open in<br>order to put<br>messages into<br>it.            | -  | -   |
| delete               | Okay, delete<br>which message<br>box?                   | mybox               | The argument must be 5-25 chars. long and start with [Aa-Zz] The argument must refer to an existing message box that is not open, and empty. | Success!<br>Message box<br>'mybox' was<br>deleted.  | -  | Error. Message<br>box 'mybox'<br>does not exist.   | Error. Message<br>box 'mybox'<br>must be closed<br>and empty when<br>attempting to<br>delete it. | -  | -   | Error. Message<br>box 'mybox'<br>must be closed<br>and empty when<br>attempting to<br>delete it. | Error. Command<br>was<br>unsuccessful,<br>please try again.   |
| close                | -   | mybox               | A message<br>box must be<br>open.  | Success!<br>Message box<br>'mybox' was<br>closed.   | -  | -  | -  | -  | Error. This client<br>does not have<br>an open<br>message box.                                | -  | -   |
| help                 | -   | -                   | -  | [print usage<br>menu]   | -  | -  | -  | -  | -   | -  | -   |
| (invalid<br>input)   | -   | -                   | An invalid<br>command<br>was entered.<br>(must be of<br>the listed<br>English<br>commands)   | "[user input]" is<br>not a valid<br>command. [print<br>usage menu]                                    | -  | -  | -  | -  | -   | -  | Error. Command<br>was<br>unsuccessful,<br>please try again.   |