| Testcase | Pass/Fai |
|---|----------|
| Testcase 2001 | Pass |
| Server startup check with default arguments | |
| Instructions: | |
| 1. Start the server program | |
| Expected result: | |
| 1. The server reports that it is listening for clients by displaying the following | |
| message: | |
| Server listening for clients on port 5555 | |
| 2. The server console waits for user input. | |
| Cleanup: | |
| Terminate the server program. | |
| Testcase 2002 | Pass |
| Client startup check without a login | |
| Instructions: | |
| 1. Start the Client program without specifying the loginID as an argument. | |
| Expected result: | |
| 1. The client reports it cannot connect without a login by displaying: | |
| ERROR - No login ID specified. Connection aborted. | |
| 2. The client terminates. | |
| Cleanup: (if client is still active) | |
| Terminate the client program. | |
| Testcase 2003 | Pass |
| Client startup check with a login and without a server | |
| Instructions: | |
| Start the Client program while specifying loginID as an argument. | |
| Expected result: | |
| The client reports it cannot connect to a server by displaying: | |
| ERROR - Can't setup connection! Terminating client. | |
| 2. The client terminates. | |
| Cleanup: (if client is still active) | |
| Terminate the client program. | |
| Testcase 2004 | pass |
| Client connection with default arguments | |
| Instructions: | |
| 1. Start a server (Testcase 2001, instruction 1) | |
| 2. Start a client (Testcase 2003, instruction 1) | |
| Expected results: | |
| The server displays the following messages in sequence: | |
| A new client has connected to the server. | |
| Message received: #login <loginid> from null.</loginid> | |
| <loginid> has logged on.</loginid> | |
| Note: the server specifies that it received a message from null as this is the first | |
| message received from this client. It will record the loginID of this client for later | |
| messages. Hence, for later messages, it should display: | |
| Message received: <user input=""> from <loginid></loginid></user> | |

| Testcase | Pass/Fai |
|--|----------|
| Where <user input=""> is the content of the message received and <loginid> is the</loginid></user> | |
| loginID of the sending client. | |
| 2. The client displays message: | |
| <loginid> has logged on.</loginid> | |
| 3. The client and the server wait for user input. | |
| Cleanup: (unless proceeding to Testcase 2005) | |
| Terminate the client program. | |
| Terminate the server program. | |
| Testcase 2005 | pass |
| Client Data transfer and data echo | |
| Instructions: | |
| 1. Start a server and a client using default arguments (Testcase 2004 instructions). | |
| 2. Once connected, type in data on the client console and press ENTER. | |
| Expected results: | |
| 1. The message is echoed on the client side, but is preceded by the sender's loginID | |
| and the greater than symbol (">"). | |
| 2. The server displays a message similar to the following: | |
| Message received: <user input=""> from <loginid></loginid></user> | |
| Cleanup: | |
| Terminate the client program. | |
| Terminate the server program. | |
| | |
| Testcase 2006 | pass |
| Multiple local connections | |
| Instructions: | |
| 1. Start a server and multiple clients with DIFFERENT loginIDs and connect them to | |
| the server using default arguments. (Testcase 2005 instructions). | |
| 2. Start typing on all the client consoles AND the server console, pressing ENTER to | |
| send each message. | |
| Expected results: | |
| 1. All client messages are echoed as in Testcase 2005. | |
| 2. All messages from the server console are echoed on the server console and to all | |
| clients, but are preceded by "SERVER MESSAGE>". | |
| Cleanup: | |
| Terminate the clients. | |
| Terminate the chefits. Terminate the server program. | |
| | |
| Testcase 2007 | pass |
| Server termination command check | |
| Instructions: | |
| 1. Start a server (Testcase 2001 instruction 1) using default arguments. | |
| 2. Type "#quit" into the server's console. | |
| Expected result: | |
| 1. The server quits. | |
| · | |
| Cleanup (If the server is still active): | |

| Testcase | Pass/Fail |
|---|-----------|
| Testcase 2008 | pass |
| Server close command check | |
| Instructions: | |
| Start a server and connect a client to it. (Testcase 2004) | |
| 2. Stop the server using the #stop command. | |
| 3. Type "#close" into the server's console. | |
| Expected result: | |
| 1. Server displays in sequence: | |
| Server has stopped listening for connections. | |
| <loginid> has disconnected.</loginid> | |
| 2. The client displays: | |
| The server has shut down. | |
| 3. The client terminates | |
| Cleanup: | |
| Terminate the client program. | |
| Terminate the server program. | |
| Testcase 2009 | pass |
| Server restart | |
| Instructions: | |
| Start a server. | |
| 2. Close the server using the #close command. | |
| 3. Type "#start" into the server's console. | |
| 4. Attempt to connect a client. | |
| Expected result: | |
| 1. The server closes, restarts and then displays: | |
| Server listening for connections on port 5555. | |
| 2. The client connects normally as described in Testcase 2004. | |
| Cleanup: | |
| Terminate the client program. | |
| Type #quit to kill the server. | |
| Testcase 2010 | nass |
| Client termination command check | pass |
| Instructions: | |
| 1. Start a server | |
| 2. Connect a client. | |
| 3. Type "#quit" into the client's console. | |
| Expected result: | |
| 1. Client terminates. | |
| 1. Client terminates. Cleanup: (If client is still active) | |
| ··· | |
| Terminate the client program. Testcase 2011 | nace |
| | pass |
| Client logoff check | |
| Instructions: | |
| 1. Start a server (Testcase 1001, instruction 1), and then connect a single client to | |
| this server. | |
| 2. Type "#logoff" into this client's console. | |
| Expected results: | |

| Testcase | Pass/Fail |
|--|-----------|
| Client disconnects and displays Connection closed. | |
| Cleanup: | |
| Type "#quit" to kill the client. | |
| Testcase 2012 | pass |
| Starting a server on a non-default port | |
| Instructions: | |
| 1. Start a server while specifying port 1234 as an argument. | |
| Expected result: | |
| 1. The server displays | |
| Server listening for connections on port 1234. | |
| Cleanup: | |
| Type #quit to kill the server. | |
| Testcase 2013 | pass |
| Connecting a client to a non-default port | |
| Instructions: | |
| 1. Start a server on port 1234 | |
| 2. Start a client with the arguments: < loginID> < host> 1234 | |
| (replace the parameters by appropriate values). | |
| Expected Result: | |
| The connection occurs normally. | |