## Custom Network Test Application

### Description

Custom network test application (custom\_nw) demonstrates the use of TCP client in Talaria TWO, to execute the network test by establishing a TCP connection to a remote Host in the network. Once Talaria TWO receives data on TCP client socket from TCP server, it loops back the received data.

This application also enables closing of the TCP connection.

### Prerequisites

1. GTKTerm or similar application.

### Command Description

Connect to an Access Point with the specified SSID and passphrase.

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| --- |
| $ ./conmgr connect <SSID> <passphrase> |

Connect to a remote Host over TCP from Talaria TWO.

|  |
| --- |
| # ./custom\_nw cli <hostname> <port> |

where,

1. hostname – host-name/ipaddress of the remote Host.
2. Port – TCP server port number on the remote host.

Close TCP connection with remote Host.

|  |
| --- |
| # ./custom\_nw close |

### Procedure

Execute the following operations on Talaria TWO:

Step 1: Connect Talaria TWO to the desired network by providing SSID and passphrase.

Step 2: On a Windows Host machine, start TCP server on port 8080 using Hercules application. This Host

machine should be connected to the same network as Talaria TWO.

Step 3: On Talaria TWO, start the TCP client socket on port 8080.

Step 4: Send data from Hercules application to Talaria TWO.

### Expected Output

#### Host Console Logs

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| --- |
| pi@raspberrypi:~/dualstack\_redesign/hapi $ ./dual\_stack/bins/conmgr connect WifiVirus stonewall300  Connected  Status : Success  pi@raspberrypi:~/dualstack\_redesign/hapi $ ./dual\_stack/bins/custom\_nw cli 1 192.168.1.155 20022  Status : Success  pi@raspberrypi:~/dualstack\_redesign/hapi $ ./dual\_stack/bins/custom\_nw close  Status : Success |

### List of Message IDs Used

This application demonstrates the use of custom Wi-Fi connection in Dual-Stack custom applications and uses Group number 66. Following are the message IDs used:

1. CUSTOM\_NW\_CLIENT\_REQ

This message is sent to Talaria TWO to start the client. Talaria TWO receives this message and replies with CUSTOM\_NW\_CLIENT\_RSP.

1. CUSTOM\_NW\_CLOSE\_REQ

This message is sent to Talaria TWO to close the client connection. Talaria TWO receives this message and replies with CUSTOM\_NW\_CLOSE\_RSP.