Network Hub BeaglePlay Hardware Set Up

Introduction

This manual shows instructions on initialising configuration settings for a network hub using the BeaglePlay board.

Software Required on Local Computer
- WinSCP
- PuTTy

Quick Reference Guide
1. Connect laptop/pc to the USB – C port of BeaglePlay board. The USB – C port supports data transfer.
2. Obtain the network hub Python code from Github repository to the local computer.
3. Use WinSCP to transfer the network hub Python script from local computer to BeaglePlay.
4. Open PuTTy terminal emulator on local computer and connect to BeaglePlay terminal.
5. The following instruction is required to initialise the python script everytime the BeaglePlay reboot:
    a. From BeaglePlay terminal, create a new systemd service file:

       sudo nano /etc/systemd/system/myscript.service

    b. Then, write the following code:

       [Unit]
       Description=My Script Service
       After=multi-user.target

       [Service]
       Type=idle
       ExecStart=/usr/bin/python /home/debian/myscript.py

       [Install]
       WantedBy=multi-user.target

       Change the "/home/debian/myscript.py" with the actual directory where the Python script is saved.

    c. Save the file and exit by using keyboard key "Ctrl+X" then type "Y" to save and "Enter" to exit.

    d. To apply the changes, reload systemd by writing the following line into BeaglePlay terminal:
       sudo systemctl daemon-reload

    e. Initialise and run the service on boot by type the following line on terminal:

sudo systemctl enable myscript.service

6. Configure the XBEE module as coordinator. Refer to document "User Guide Setting Up XBEE Module" for manuals.
7. Connect the XBEE module to the USB – A port of BeaglePlay board.
8. Disconnect the USB – C from laptop/pc and connect 5V power supply to the USB – C port.
9. The Python script will automatically run once the BeaglePlay reboots.