



Developer Study Guide: An introduction to Bluetooth Mesh Networking

Hands-on Coding Lab - Troubleshooting Tips

Release : 2.1.0

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Revision History

Version	Date	Author	Changes
1.0.0	15 th June 2018	Martin Woolley Bluetooth SIG	Initial version.
1.0.4	14 th December 2018	Martin Woolley Bluetooth SIG	<p>Minor errata:</p> <p>#11 - Exercising the generic level state would work visibly even if the onoff state was OFF. This was not correct. Imagine a dimmer control which when pressed acts as an on/off switch. Rotating the knob will have no effect if the lights are switched off. That's how the generic onoff server and generic level server should work when incorporated together in a device. The two states are now handled completely independently. Code and documentation adjusted accordingly.</p> <p>#12 - Light node should have subscribed to the group address once for each model. A bug in Zephyr 1.12 allowed a subscription to only one model to be sufficient for all models to have messages published to that address routed to them so there was no user discernible impact of this issue at Zephyr 1.12. Code has been adjusted.</p>
2.0.0	16 th December 2019	Martin Woolley Bluetooth SIG	Updated to use Nordic Thingy and an nRF52840-DK board. Based on the generic on off and light HSL mesh models.
2.0.1	21 st December 2020	Martin Woolley Bluetooth SIG	Language changes
2.1.0	29 th June 2021	Martin Woolley Bluetooth SIG	<p>Release:</p> <p>Zephyr code now based on version 2.6.0 of the Zephyr SDK</p> <p>Document:</p>

Troubleshooting

1. Messages sent by one device seem to be ignored by the receiving device(s)

Check the console messages output by each device.

Check that both devices have been provisioned.

Check that you have bound the same application key to each of the client and server model.

Check that you have configured the client model on the switch node to publish to the 0xC000 group address.

Check that you have configured the server model on the light node to subscribe to the 0xC000 group address.

Check that your code includes the right models in its node composition. Check that you have routed messages with the appropriate opcode to a handler function.

2. When testing set and get messages, more than one message seems to be received by the light node whenever when a button is pressed

Check the Publish Retransmission configuration data using your provisioning and configuration application. Retransmit Count should be set to zero. If it is set to a non-zero value, multiple duplicate messages will be published automatically.

3. Problems with the nRF Mesh application

Please contact Nordic Semiconductor via their support web site for assistance with their application:
<https://devzone.nordicsemi.com/f/nordic-q-a>