

## Q&A for Tech Talk Topic: Zigbee Plugins and Callbacks

Q: Can Zigbee be made aware of location like Bluetooth?

A: Zigbee does not have anything similar to Bluetooth AoA. It might be possible to estimate distance with RSSI but this would not be very accurate. Another option would be to use our EFR32MG in Dynamic Multiprotocol (DMP) mode to run both Zigbee and BLE in the same chip, then use the BLE protocol to send AoA CTE packets.

Q: If I wanted to use the SEP stack for talking to utility meters, where would I start?

A: Our stack supports Smart Energy and there are plugins in the SDK. To get started developing a device for Smart Energy, take a look at our landing page at: <https://www.silabs.com/support/getting-started/mesh-networking/zigbee/mighty-gecko>

Q: Will there be a similar webinar about a Zigbee controller example based on Ember or CLI?

A: This is a good suggestion; thank you for the feedback. Other Zigbee training material is available here: <https://www.silabs.com/support/training/mesh>

Q: Does Simplicity Studio allow you to have the callbacks in different files so a complex code would be more structured?

A: Yes absolutely. You can move them to wherever you'd like as long as AppBuilder is aware and can make them available to you.

Q: Which Silicon Labs part did you use for this demo?

A: This example used a kit based on the EFR32MG12P432F1024GL125, a 1MB part. We have parts which vary from 256kB of flash to 1MB of flash, and all of them work in the same way with callbacks and plugins. Your choice of SoC will depend on your application software needs.

Q: Please elaborate on the OTA update service: how does it know when to start a update and what is a legitimate server for firmware?

A: Normally, your product will poll your server to find out when an update is available. Once there is an update available, you will initiate the OTA process using the secure bootloader on the device.

Q: Where can we find the NCP API? The online documentation seems to be empty (<https://docs.silabs.com/zigbee/latest/af/group-xncp>)

A: When you choose NCP mode, the code that is generated is targeted for an external application processor running Linux, rather than the Zigbee chip. The EZSP protocol is the interface between your application processor and the chip. You can also do this with a command line interface to create your own command/response protocol.

Q: What is the best software method to test RF (power, sensitivity , etc.)?

A: Our protocol software libraries also include utilities for performing RF test. For Zigbee specifically, this is called MFGLIB and allows you to put the device into continuous carrier mode on different channels. See <https://docs.silabs.com/zigbee/latest/af/group-mfglib-cluster>

Q: What attribute lets a Zigbee node know which network it is a part of?

A: This is the PAN ID parameter. You might appreciate this User Guide on Zigbee Fundamentals: <https://www.silabs.com/documents/public/user-guides/ug103-02-fundamentals-zigbee.pdf>

Q: Are your plugins already certified with the Zigbee Alliance?

A: In the plugins tab, you will see a description of the plugin quality level. Plugins which are marked as Production Ready have already been tested and certified with the Zigbee Alliance. You will also see some plugins designated as Test Only, which have not been through certification and some which say Needs Extending, which mean they can only be certified on your own hardware.