

Introduction to Zigbee Mesh

Zigbee Point-point Communication

A Wireless Sensor Network (WSN) will be designed and implemented based on Arduino / Raspberry pi and IEEE 802.15.4/Zigbee standards. This network consists of end nodes, Router nodes and coordinator nodes. Xbee S2C modules will be used for this purpose.

Xbee S2Cs can connect and talk to each other over 2.4 GHz RF. As a start, we will be implementing a P-P communication where two nodes can talk to each other. One Xbee S2C module will be configured as End node and another one as coordinator. End node will be sending the data to the coordinator and coordinator will print that in a serial monitor.

At first the configuration of the modules. Connect two modules to your PC, open the XCTU software and hit the search devices. Add the selected device. After that update the Firmware. Select XB24C, Zigbee TH Reg and the newest firmware version.

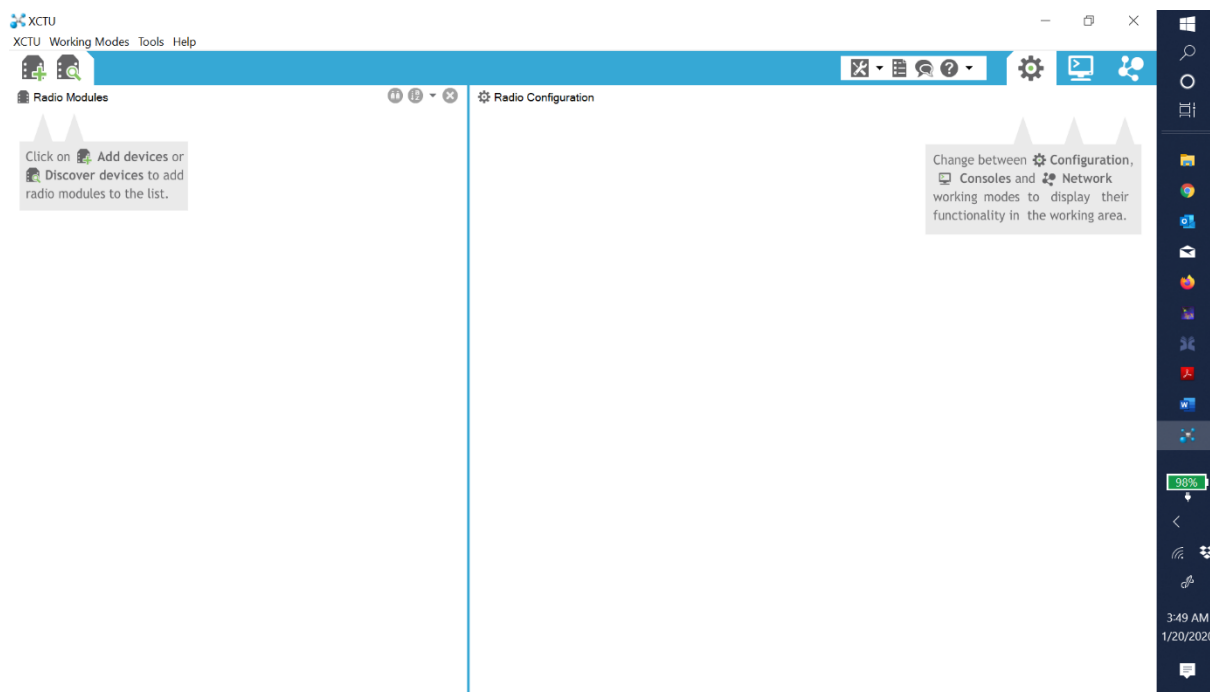


Figure 1 XCTU startup interface

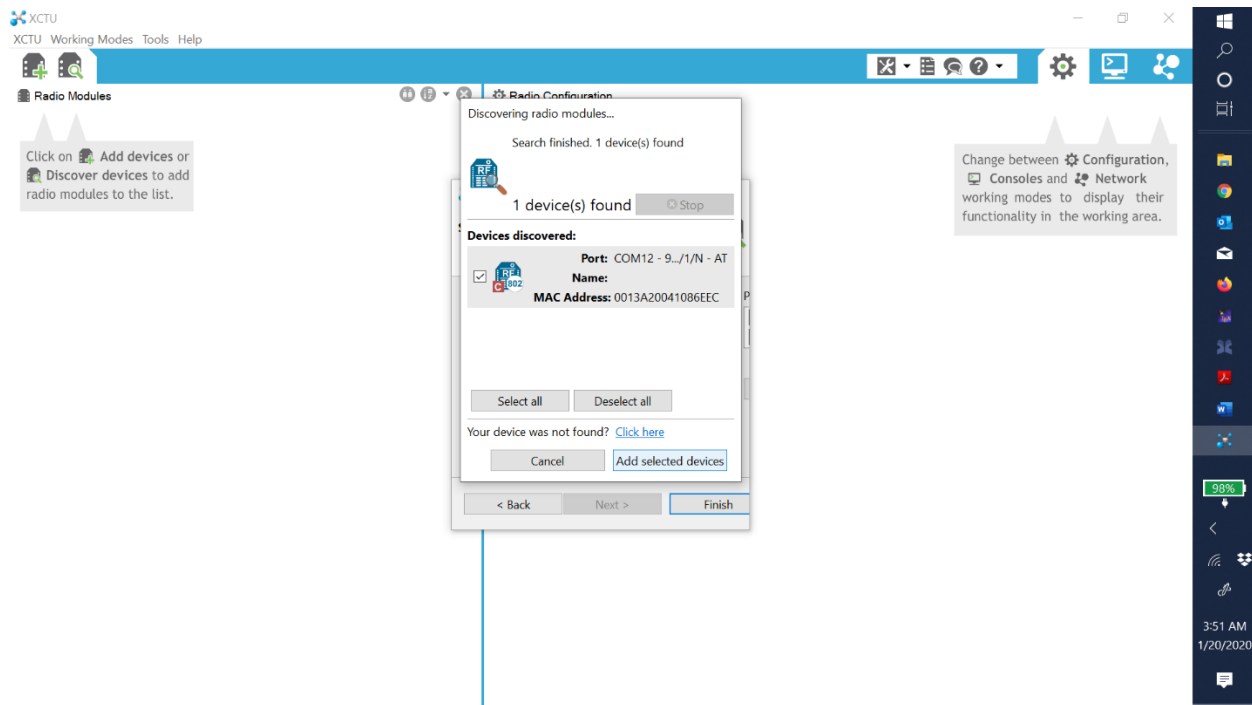


Figure 2 Search the connected device and add them

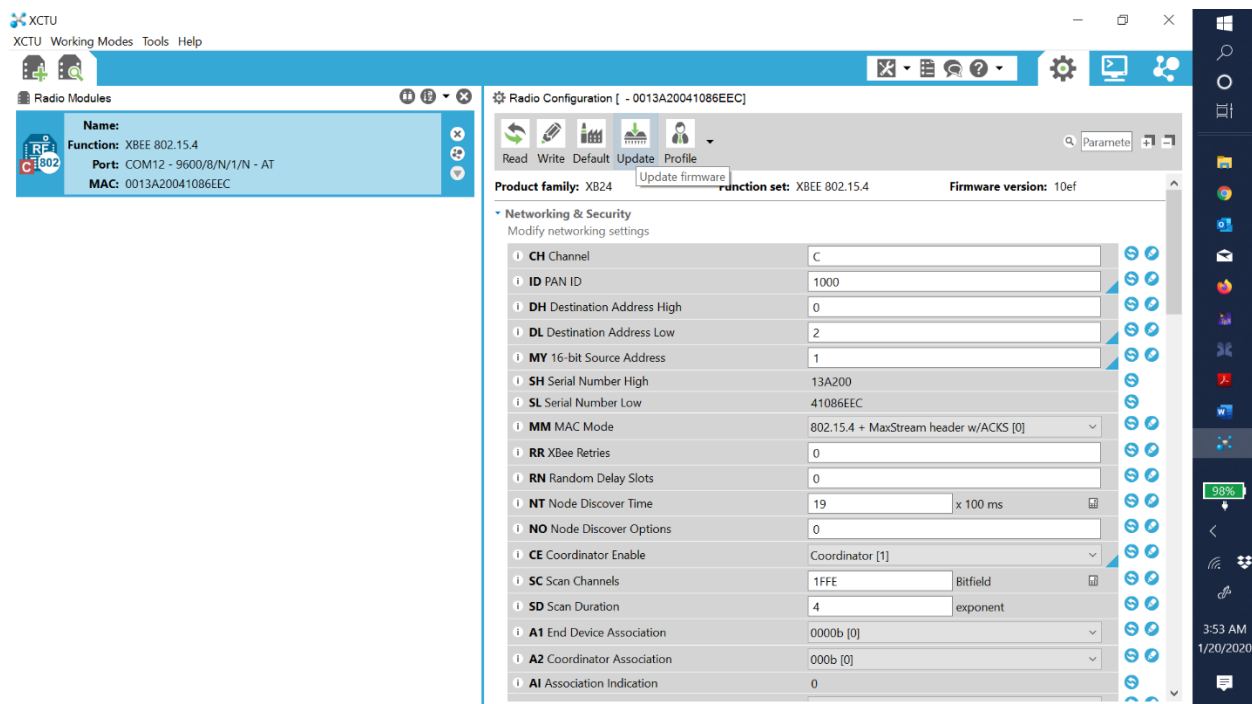


Figure 3 Update firmware as instructed above