LAB 2

Outline (4 sections):

1. ZigBee networking basics (forming & joining a network; routing).

2. Try ZigBee networking through PuTTy console.

3. Add RFD node into the network.

4. Try the different ZigBee router modes.

Section 1: ZigBee network layer basics

Please refer to the relevant parts (networking/routing) in "**ZigBee 2006 Application Note AN1232**", "**A Quick Guide to AODV Routing**" and "**ZigBee Specification 2006**", try to understand the design of ZigBee network layer. You could also search it on the web for more information. Try to have general understanding on the following topics:

- How a ZigBee coordinator forms a network.
- How a ZigBee node (router or RFD) joins into an existing network.
- What's the design of routing of ZigBee network? What's the role of RFD nodes?

This should be done before the lab. During the lab, you will observe it through the Zena monitoring software, which will help you to understand better. Also, **a good understand about ZigBee network layer will be very helpful for completing your group final project report**.

Section 2: Try ZigBee networking through PuTTy

In this part, you will be operating on the real hardware to try ZigBee networking. Please refer to "**Lab2Guide**" for detailed procedures. Use Zena well in this section; try to read the monitored packets, and find out the related processes mentioned in section 1. Have fun!