E20 Kit1 Demo

This demonstration kit showcases the following products:

- SNAP Connect E20
- SN171 Prototyping board, with RF200 module
- SN173 Prototyping board with SM220 module
- SS200 USB SNAP Stick
- SN132 USB SNAP Stick (loaded with SNAP Sniffer image)

The kit ships with a preloaded demonstration application which runs right out of the box. Simply power up the E20 and use a PC or mobile device to connect to its' Wifi access point:

SSID: synapse-e20
Password: synapse1

Open a web browser, and point to the E20's URL: http://192.168.0.1

The web page will display a simple table of wireless SNAP nodes reporting "status". The SN171 and SN173 boards are preloaded with SNAPpy scripts which report status every 5 seconds, or when a button is pressed.

Connect the battery packs to the SN171 and SN173 boards, and verify each pack's switch is ON.

You should see a blinking LED on each prototyping board. Also, you'll see both devices show up in the HTML table displayed in your web browser.

As you press button-1 on each board, you'll see the press-count immediately updated in your browser. Also the current state of each button will be reflected in realtime. In addition, the boards report their current battery level.

Exploring the Demo

Full source code for this example is available on Github here: https://github.com/synapse-wireless/demo-kits

The Synapse Portal IDE will allow complete embedded module development, as well as wireless sniffer capability – download latest version here: https://forums.synapse-wireless.com/showthread.php?t=9

The web application is a basic python program built with high-performance libraries, Tornado and SNAP Connect. The javascript/html is kept deliberately simple for ease of understanding, although it showcases a low-latency websockets technique. This can be easily extended to REST interfaces, and other web/backend approaches to fit application requirements.

See the readme.txt in the web_app directory for details and library dependencies.