Overview

The USB PHDC WeighScale application is a simple demonstration program based on the KSDK. It is enumerated as a weight scale device and the HealthLink software is used to interact with this device to simulate the personal weight scale data, such as body mass and body mass index.

System Requirement

Hardware requirements

- Mini/micro USB cable

- USB A to micro AB cable

- Hardware (Tower module/base board, and so on) for a specific device

- Personal Computer (PC)

Software requirements

- The project files for lite version example are in:
  <SDK_Install>/boards/<board>/usb_examples/usb_device_phdc_weighscale_lite/<rtos>/<toolchain>.
  For non-lite version example, the path is:
  <SDK_Install>/boards/<board>/usb_examples/usb_device_phdc_weighscale/<rtos>/<toolchain>.

  Note

     The <rtos> is Bare Metal or FreeRTOS OS.

- The HealthLink software installed in Personal Computer(PC)

Getting Started

Hardware Settings

- The Jumper settings:
  J9 7-8, Remove all jumpers from J23.

  Note

     Set the hardware jumpers (Tower system/base module) to default settings.

Prepare the example

1. Download the program to the target board.

2. Connect the target board to the external power source (the example is self-powered).

3. Power off the target board. And then power on again.

4. Connect a USB cable between the PC and the USB device port of the board.

Note

   For detailed instructions, see the appropriate board User's Guide.

Run the example in Windows

1. Download HealthLink software at www.lnihealth.com Contact the `support@lnihealth.com` to get a license.

2. Install HealthLink software and the USB driver.

3. When running the HealthLink for the first time, create a new account to store data. In Edit Menu, choose Advance->Transport Settings and ensure that Enable USB Connection check box is checked.
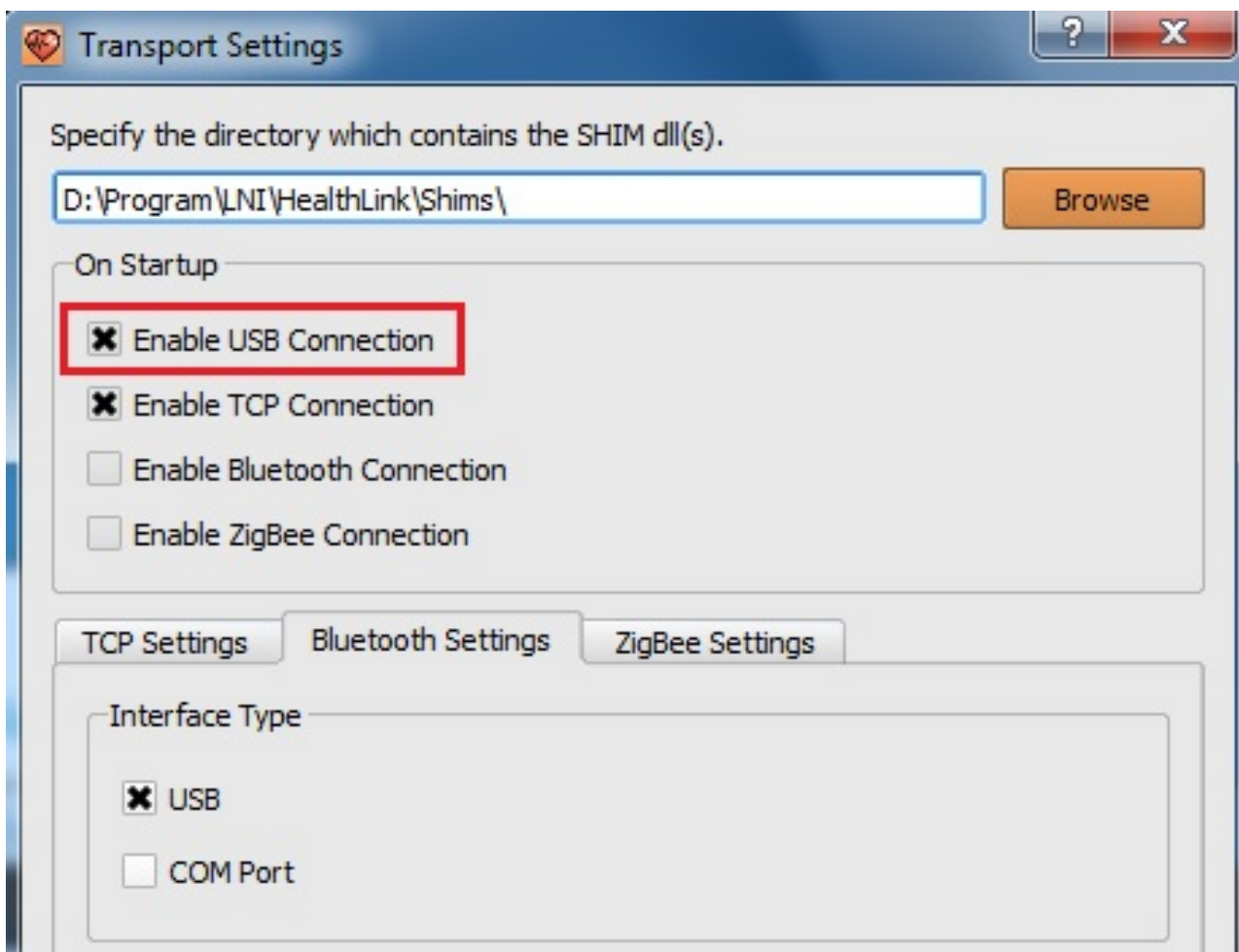

Figure 1: Enable USB connection

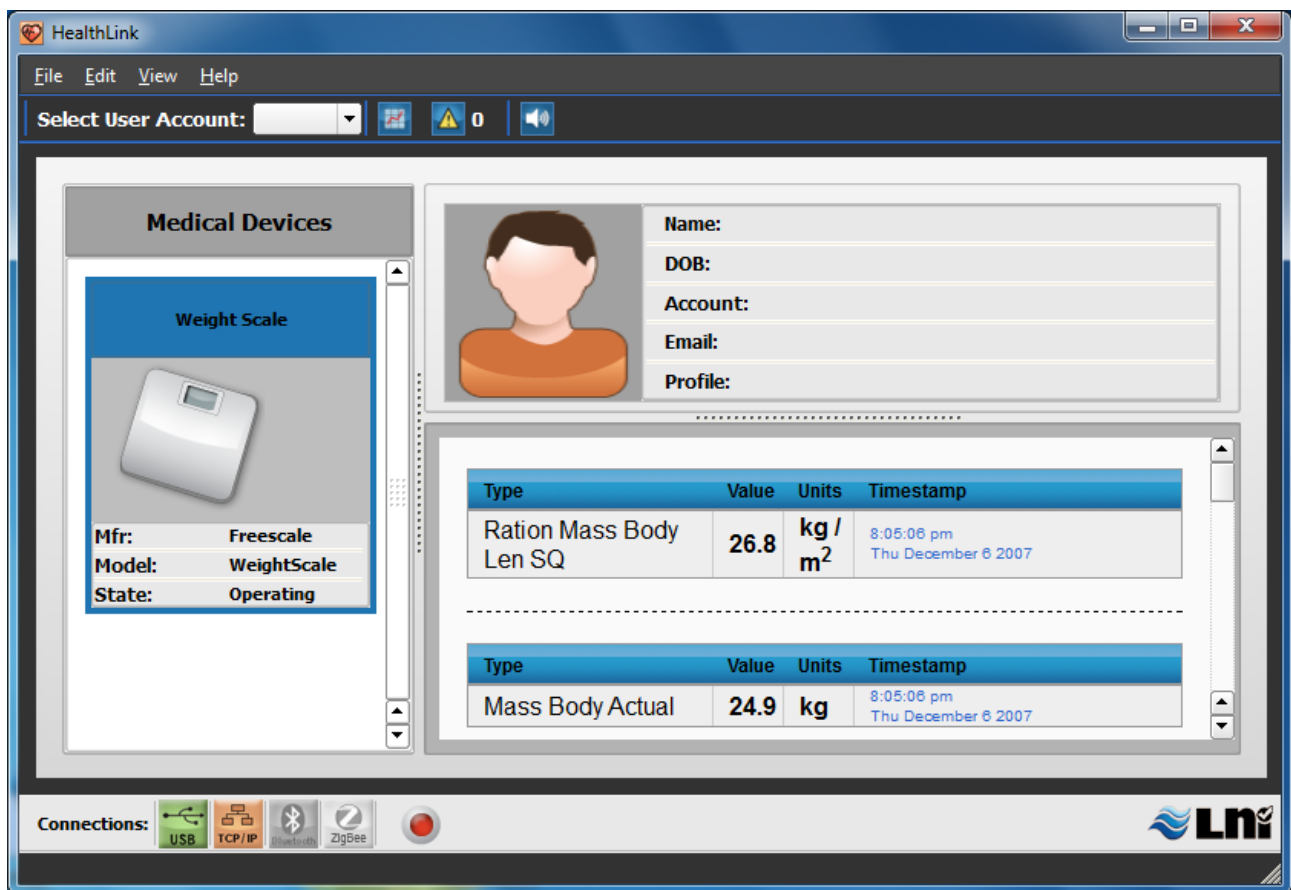4. Plug in the target board, which is running the PHDC WeighScale example, into the PC. The state of the device and the received data will show up.

Figure 2: Healthlink operation