Installing Navigator

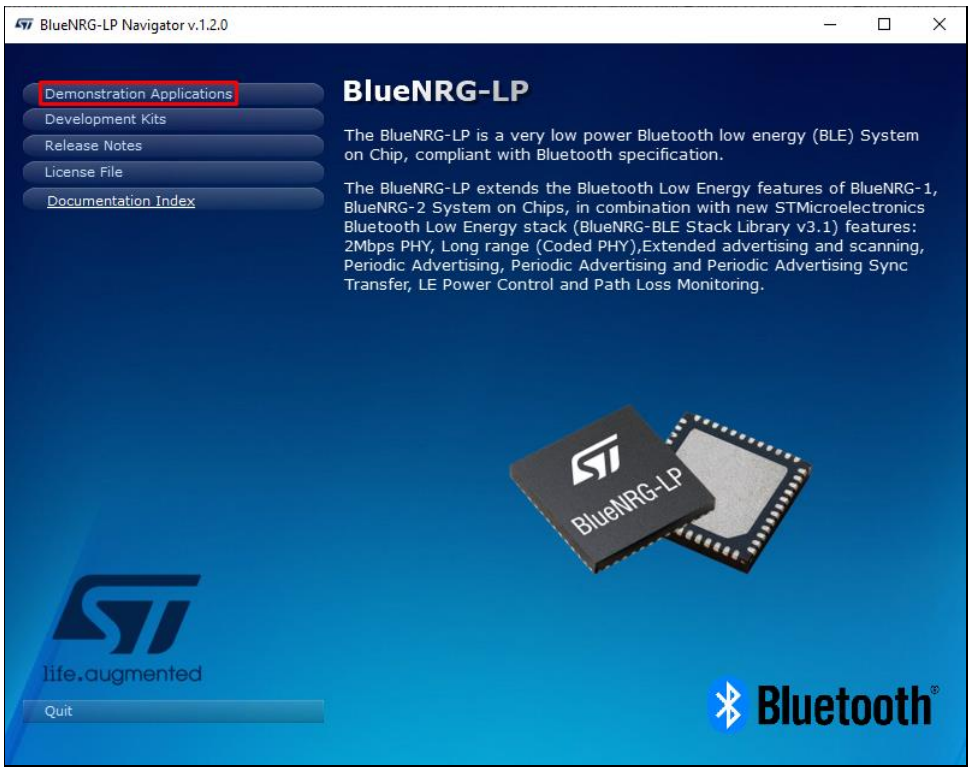
You can find firmware examples on STMicroeletronic's BlueNRG-LP SDK, they contain a plethora of examples on BLE and peripherals. As BlueNRG-LP is the core of the HTLRBL32L SiP, all examples provided are compatible. This document will help you install and run the SDK examples.

Steps:

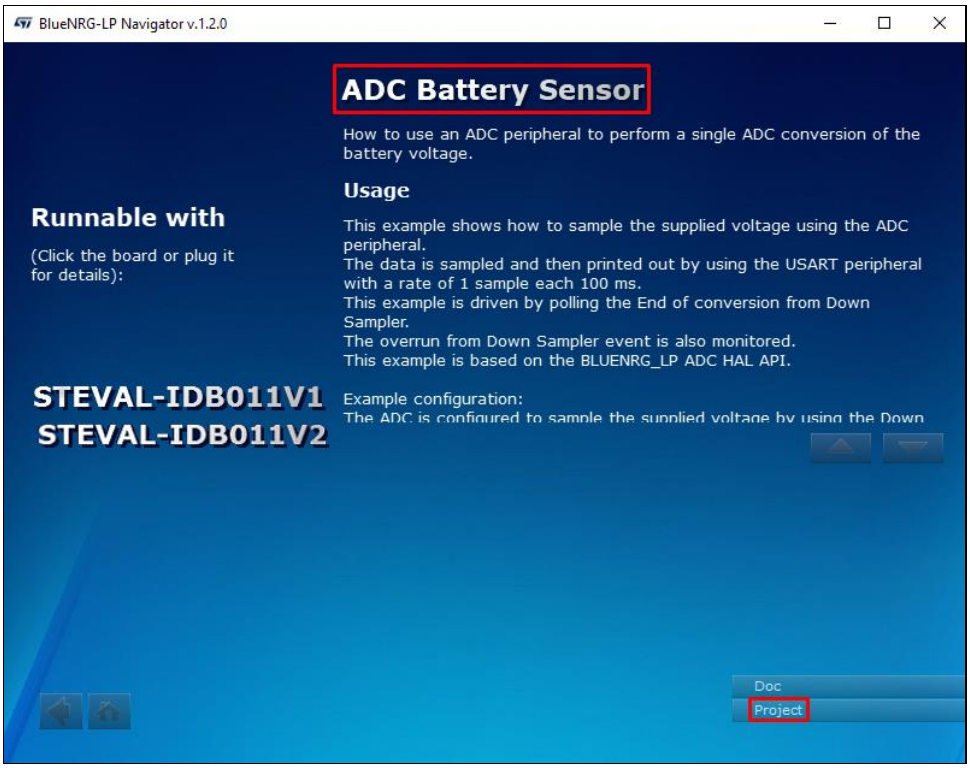
1. Download the STSW-BNRGLP-DK installer.
2. Run the executable and perform the installation.

Opening Navigator Projects with WiSE-Studio

1. Run the 'BlueNRG-LP Navigator' program (use the Windows search bar).
2. Go into 'Demonstration Applications', there you can find example projects to run with HTLRBL32L (ideally pick examples that don't require external devices/pin connections).

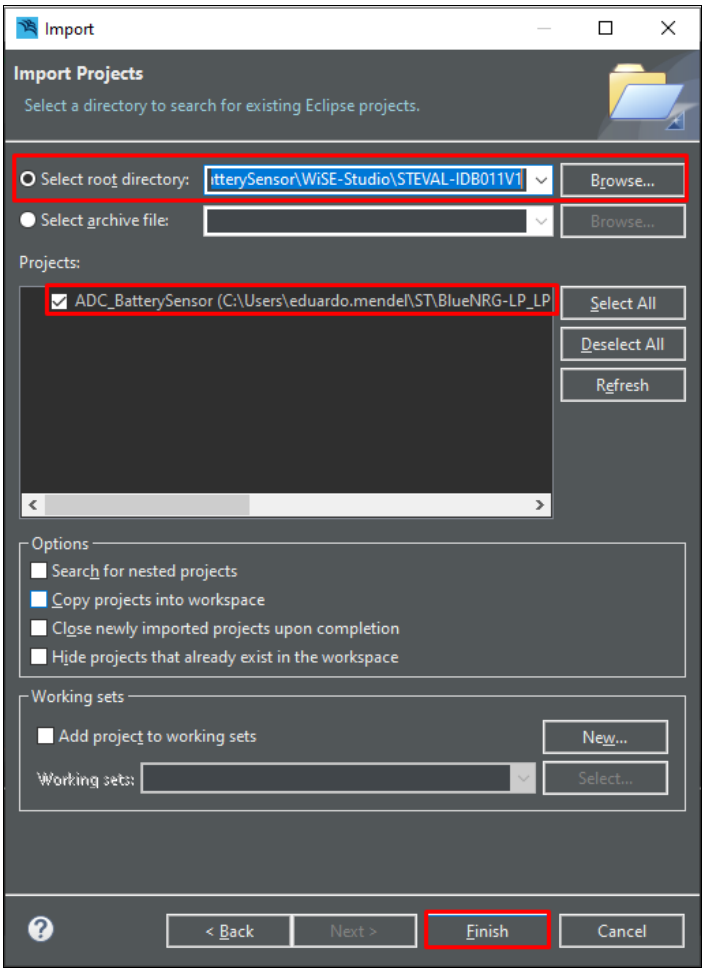


3. For example, go into 'Peripherals HAL drivers examples' > 'ADC' > 'ADC Battery Sensor'. On the bottom right of the screen, click on 'Project' to open the project's 'Src' folder in the file system.

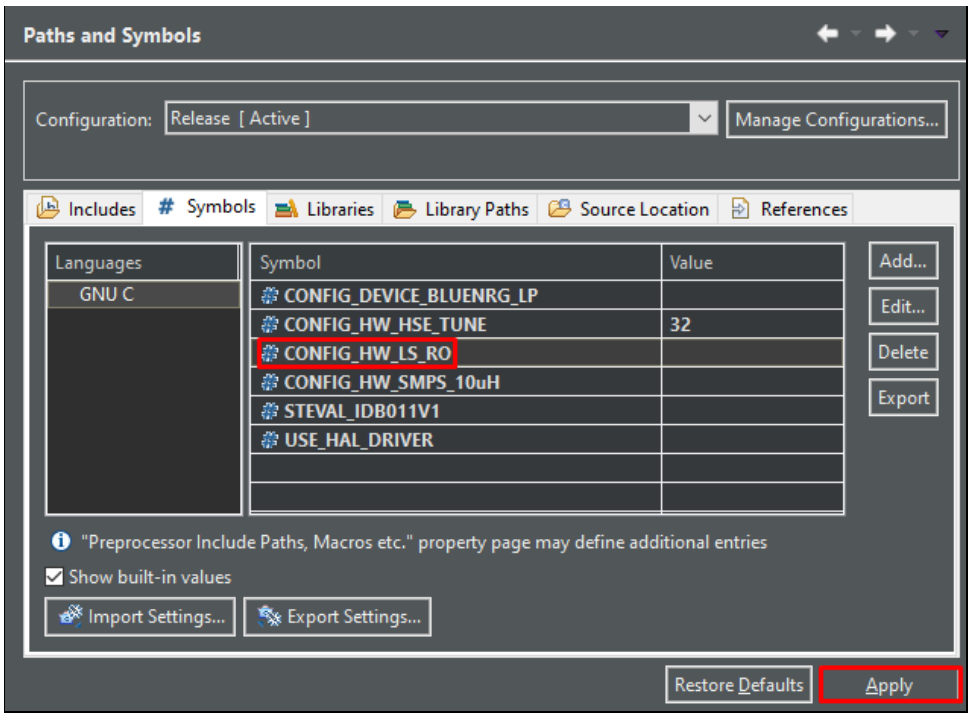


Obs.: You can click on ‘Doc’ to find detailed information about the application.

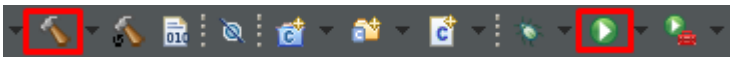
4. Open WiSE-Studio, import an existing project to your workspace (File -> Import -> General -> Existing Projects into Workspace) and insert the application's WiSE-Studio directory path in the root directory field (from the previous example, ...\ST\BlueNRG-LP_LPS DK 1.2.0\Projects\Periph_Examples\HAL\ADC\ADC_BatterySensor\WiSE-Studio).



5. Right click on the opened WiSE Studio Project and go into ‘Properties’ > ‘C/C++ General’ > ‘Paths and Symbols’ > ‘Symbols’, delete the “CONFIG_HW_LS_XTAL” preprocessing symbol and add one named “CONFIG_HW_LS_RO”.



6. Build the project and download the binary into the device/press ‘Run’ on WiSE Studio.



7. Open a RS232 terminal (such as Termite), configure it to the projects’ USART specifications (found in the ‘ADC_BatterySensor_main.c’ comments, screenshot below) and connect it to the COM port being used by the device. You should now be seeing the voltage readings in the terminal.

```
@table
| Parameter name   | Value            | Unit      |
-----------------------------------------------------
| Baudrate         | 115200 [default] | bit/sec   |
| Data bits        | 8                | bit       |
| Parity           | None             | bit       |
| Start bits       | 1                | bit       |
| Stop bits        | 1                | bit       |
| HW flow control  | None             | bit       |
@endtable
```