@page Parking_Node Readme file ******************* ***** * @file Parking_Node/readme.txt * @author @Narasing Sarwade This application is a parking demo based on LoRa Object connecting to * @brief a LoRa Network. Parking slot status(car present/not) is sent over networkserver. ************************* ***** * Copyright (c) PI R Square Digital Pvt. Ltd. All rights reserved. * This software component is licensed by PI R Digit Pvt. Ltd under Ultimate Liberty license * , the "License"; You may not use this file except in compliance with * the License. You may obtain a copy of the License at: https://www.pirsquaredigital.com/ ******************** @parking Example Description This directory "documentation_sw_parking_project_zip_disco_l072cz_lrwan1" contains a set of source files that implements a parking prjects of an end device The LoRa Object can be - either Parking module containing Lora Radio expansion board with sensor board. - or a B-L072Z-LRWAN1 By setting the LoRa Ids in mbed app. ison file according to the LoRa Network requirements, the end device will send periodically the sensor data to the LoRa network. @parking Directory contents Parking_module/config/SX127X_example_config.json SX1276 commissioning file - Parking_module/mbed-lora-radio-drv/sx1276/mbed_lib.json SX1276 SPI Interface functionality - Parking_module/mbed-lora-radio-drv/sx1276/sx1276_loraradio.cpp Lorawan stack layer definations - Parking_module/mbed-lora-radio-drv/sx1276/sx1276_loraradio.h Lorawan stack layer calls - Parking_module/CONTRIBUTING.md Contributing to Mbed OS - Parking_module/DummySensor.h Dummy sensor

- Parking_module/lora_radio_helper.h

Header for lora radio

- Parking_module/main.cpp
 Main program file
- Parking_module/mbed_app.json

End device commissioning parameeters

Parking_module/mbedtls_lora_config.h
 Security encryption lora stack

- Parking module/OMC5883L.cpp

QMC5883L function definations

- Parking_module/QMC5883.h

QMC5883L function calls

- Parking_module/trace_helper.cpp

see traces from within the stack

- Parking_module/trace_helper.h

Helper function for the application to setup Mbed trace

@parking Hardware and Software environment

- This application has been tested with STMicroelectronics:
 - -Parking module
 - -B-L072Z-LRWAN1 RevC

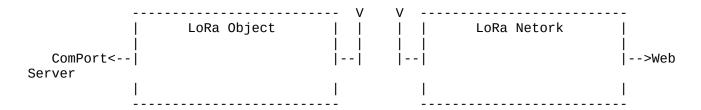
boards and can be easily tailored to any other supported device and development board.

- Parking module
- 1. Connect the battery to J3 connector to Parking module and press &release threshold button after 1 \min

0R

- 2. CONNECT 3.3V TO parking module
- BL072Z-LRWAN1 DEV board
 - Connect the dev board to your PC with a USB cable type A to mini-B
- Please ensure that the ST-LINK connector CN2 (CN8 on B-L072Z-LRWAN1) jumpers are fitted.

-Set Up:



@parking How to use it ?

In order to make the program work, you must do the following :

- Open your preferred toolchain(mbed OS)
- Rebuild all files and load your image into target memory
- Run the example
- Open two Terminals, each connected the respective LoRa Object
- Terminal Config = 115200, 8b, 1 stop Bit, no parity, no flow control

* /