Examples

Mesh devices are broadly categorized into two roles: a provisioner role and a node role. The nRF5 SDK for Mesh provides several example projects to demonstrate these roles, mesh models, and certain features that will help you get started on new mesh-based projects.

Read before testing

Before you start using the examples, see the following pages:

- Installing the toolchain
- Building the mesh stack and examples
- Running examples

You can also quickly run an example without going through the complete toolchain installation. See Running a first example for details.

Available examples

The following examples are provided with this SDK:

- Light switch example is a mesh ecosystem example that contains four smaller examples: provisioner, client, server, and proxy-server.
- EnOcean switch translator client example demonstrates how to implement a third party device in Mesh ecosystem, namely an EnOcean-to-Mesh translator. The EnOcean switches send the button status using BLE advertising packets. These packets can be captured and can be used to generate equivalent mesh messages for controlling other mesh nodes.
- Beaconing example implements custom beacon advertising and shows how to send and receive custom packets using the nRF5 SDK for Mesh.
- DFU example shows how to use the mesh DFU framework to update the firmware of a device over the mesh.
- Serial example demonstrates how to use the serial interface to create a mesh connectivity device.
- Coexistence examples demonstrate how the nRF5 SDK features can be simultaneously used with nRF5 SDK for Mesh.

Moreover, the SDK comes with several Experimental examples, such as:

- Dimming examples (experimental) demonstrate how to use Generic Level model APIs in an application to implement dimming light and corresponding dimmer switch.
- Low Power node example (experimental) demonstrates the Low Power node feature.

- Remote provisioning example (experimental) demonstrates the use of remote provisioning to provision devices outside of the provisioner's radio range.

Common example modules

The examples implement common functionalities through several common modules, including among others:

- simple hardware abstraction layer,
- RTT input functionality that uses the nRF5 SDK App timer and enables the examples to poll RTT for input characters,
- Mesh stack and SoftDevice initialization helper modules,
- behaviors for several generic models.

For full overview of all common modules and detailed information, check the Application support modules API section.