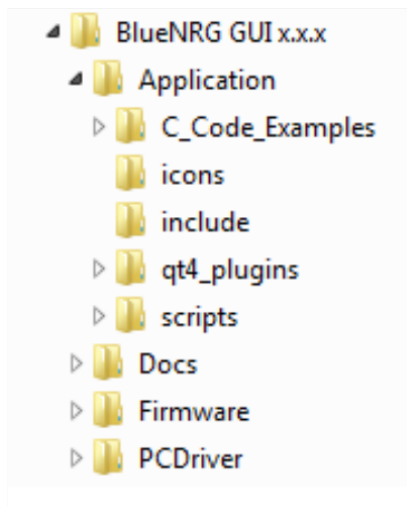


BlueNRG GUI SW package



Product status link

[STSW-BNRGUI](#)

Features

- Graphical user interface (GUI) PC application
- GUI tools:
 - Load history
 - Save history (csv file)
 - Save history as text (txt file)
 - Save as script (python file)
 - Save as C code (header and source files + IDE projects)
 - Updater
 - IFR
 - Flash motherboard FW
 - BLE over-the-air (OTA) firmware upgrade
 - Get version
 - Get production data
- GUI windows:
 - ACI commands
 - ACI utilities
 - Scripts
 - Beacon
 - RF test
- Standalone script launcher utility

Description

The **STSW-BNRGUI** software package consists of a graphical user interface (GUI) PC application that can be used to interact and evaluate the capabilities both of the BlueNRG and BlueNRG-MS Bluetooth low energy network processors, which are low power Bluetooth® Smart ICs, compliant with the Bluetooth® specifications. It also supports the BlueNRG-1 and BlueNRG-2 Bluetooth low energy systems-on-chip: low power Bluetooth® smart ICs that are compliant with the Bluetooth® specification, both in master and slave roles.

The GUI PC application can send standard and vendor-specific HCI commands to the selected device and received events from it via the ACI commands or ACI utility window. Commands and events can also be sent and received with scripts executed through the GUI script window. The list of the sent commands and received events can be saved on a file and then reloaded.

Furthermore, this list can be saved as a simple text file or as a python script, which can be customized by user and then run through the BlueNRG GUI script engine.

The BlueNRG GUI, save as C code utility allows user to store the current list of APIs and events on the BlueNRG GUI sent/received packets table as header and source files (C language), which can be used as starting point for user FW development. Complete set of toolchains projects (IAR, KEIL and Atollic where applicable) is also generated in order to allow user to store them on the BlueNRG-1, BlueNRG-2 SDK SW package and on BlueNRG, BlueNRG-MS (only IAR) SDK SW package frameworks.

The GUI PC application provides utilities to upgrade the STM32L1xx software image on the BlueNRG and BlueNRG-MS motherboards, as well as the BlueNRG and BlueNRG-MS stack images and relative IFR configurations. It also allows the BlueNRG-1 and BlueNRG-2 coprocessor binary image network upgrade and the relative hardware parameter configuration. The BlueNRG GUI also provides the BLE over-the-air (OTA) firmware upgrade tool for the client side upgrade procedure. It supports the beacon feature to configure an ST beacon device and the RF test window to send or stop a tone and perform BLE packet error rate (PER) tests using BLE direct test mode (DTM) commands.

A standalone script launcher utility is also provided in the [STSW-BNRGUI](#) software package. This utility let you run a script through a PC DOS window outside the GUI PC application context. The GUI PC application and standalone script launcher utility support all the BlueNRG, BlueNRG-MS, BlueNRG-1 and BlueNRG-2 platform kits.

1 STSW-BNRGUI software package utilities

Figure 1. BlueNRG GUI

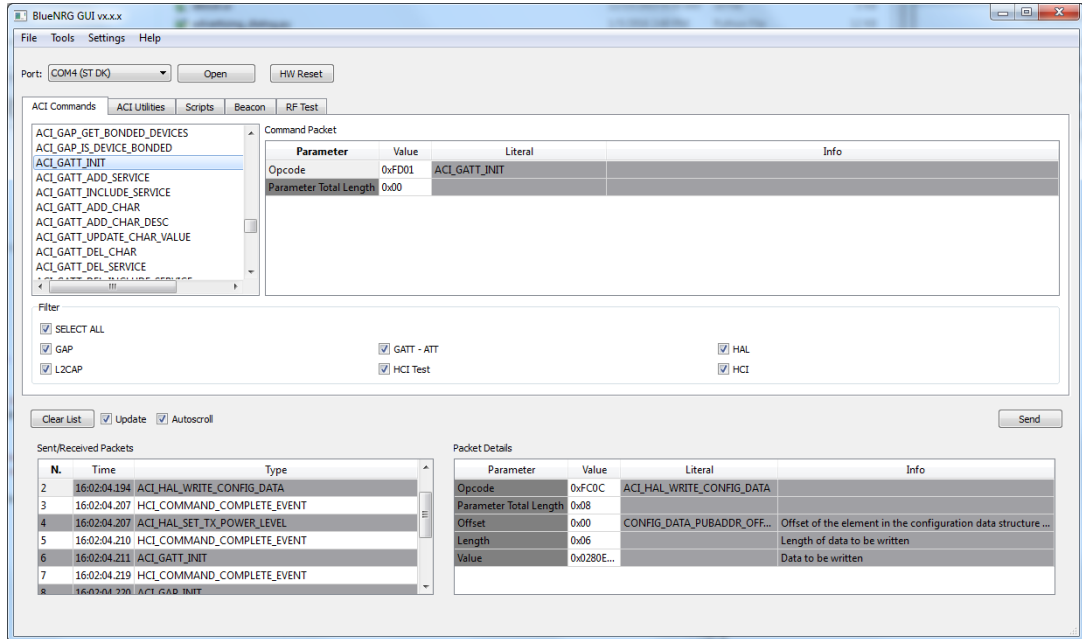
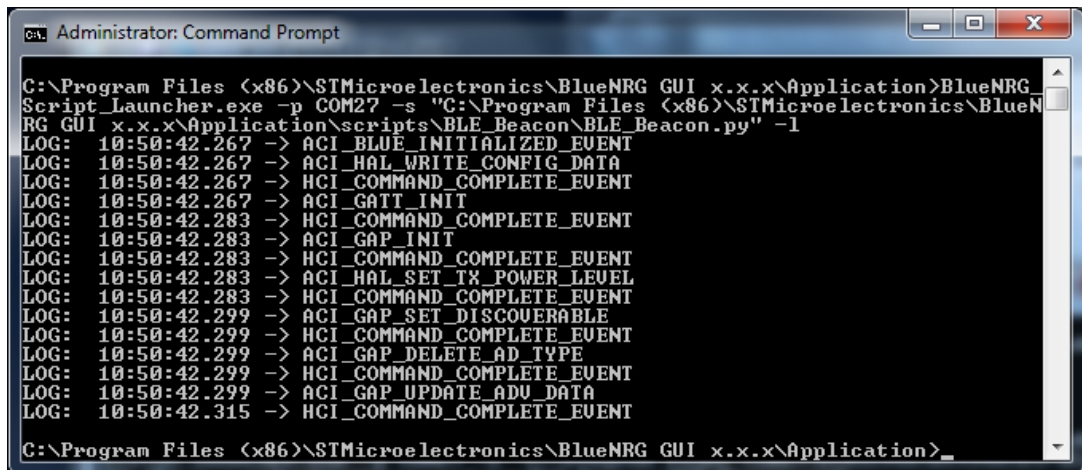


Figure 2. Script launcher utility



Revision history

Table 1. Document revision history

Date	Version	Changes
24-May-2016	1	Initial release.
24-Jun-2016	2	Added reference to BlueNRG-1 SoC.
19-Jun-2017	3	Added reference to BlueNRG-2 SoC.
29-Mar-2018	4	Updated Section • Features and Section • Description .

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