

Editing dongle memory

For visualization and convenience purposes the dongle memory in GrdUtil.exe is logically divided into separate fields. Each field is represented by a memory area containing data of specific type. In order to write data into a dongle using the utility, you need to place them into a previously created field prior to that. The set and structure of dongle memory fields forms its mask.

The dongle memory is logically divided into several areas (listed ascending the memory addresses):

Memory area	Brief description
Read-only fields	Available for reading and unavailable for writing by Guardant API functions. These fields contain system information that can be used as parameters of dongle search from within an application. From GrdUtil.exe the values of fields can be read using Dongle Information on dongle menu item.
Special operations fields	Available for reading and performing special operations by Guardant API (GrdInit, GrdProtect). Used for defining the number of hardware algorithms in the dongle and addresses of hardware locks. From GrdUtil.exe the values of fields can be read using Dongle Information on dongle menu item.
General purpose fields	Available for reading and writing. These fields contain application version number, dongle serial number, executions counter, and network license limit, etc. Used by the autoprotection utility and Guardant API functions.
Free purpose fields	Free dongle memory area. Allows for saving any data required for protecting applications. You can create fields of various types in this memory area, edit their contents and delete these fields.
Special purpose fields	Service fields used by the autoprotection utilities, remote programming and dongle diagnostics.

Further we will consider only field categories available for editing from GrdUtil.exe: general and free purpose fields.