GBMSDemo Application

User Guide

September 2013

GREEN BIT
BIOMETRIC SYSTEMS

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1 Introduction

This document provides some information about the GBMSDemo application, example application of the MultiScan Full Enhanced SDK.
This example shows how the GBMSGUI component should correctly be used and how to use it in conjunction with the top level and the BASIC SDK components (see chapter "FULL ENHANCED SDK" in MULTISCAN Overview document) in order to perform a complete acquisition process.
Even if GBMS Demo can be used "as it is" in order to have a complete acquisition system, the GBMSGUI library and GBMS Demo itself with their complete source code are provided to allow integrators to customize their own applications.

1.1 Documentation conventions

1.1.1 General Conventions

Green Bit saves the right to make changes, integrations or enhancements to this manual without notice, and this cannot be a reason to consider this present publication inadequate.

To highlight some important text parts the following graphical structure is used:

Note:
The signal is used to highlight important technical information or suggestions.

In this manual the following acronyms are used:

- IAFIS Integrated Automated Fingerprint Identification System
- IQS Image Quality Specifications

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1.2 Documentation revisions

Revision	Date	Description
V1.0	September 2010	Original
V2.7	November 2011	Description of version 1.9.4.0 of the GBMSDemo application (lined up with the MultiScan SDK v.2.7)
V2.8	August 2012	Description of version 1.9.9.0 of the GBMSDemo application (lined up with the MultiScan SDK v.2.8)
V2.9	September 2013	Description of version 1.9.12.0 of the GBMSDemo application (lined up with the MultiScan SDK v.2.9)

2 Interface Description

In this chapter a description of graphical user interface is given.

2.1 Start Window description

The start acquisition window is structured as follows:

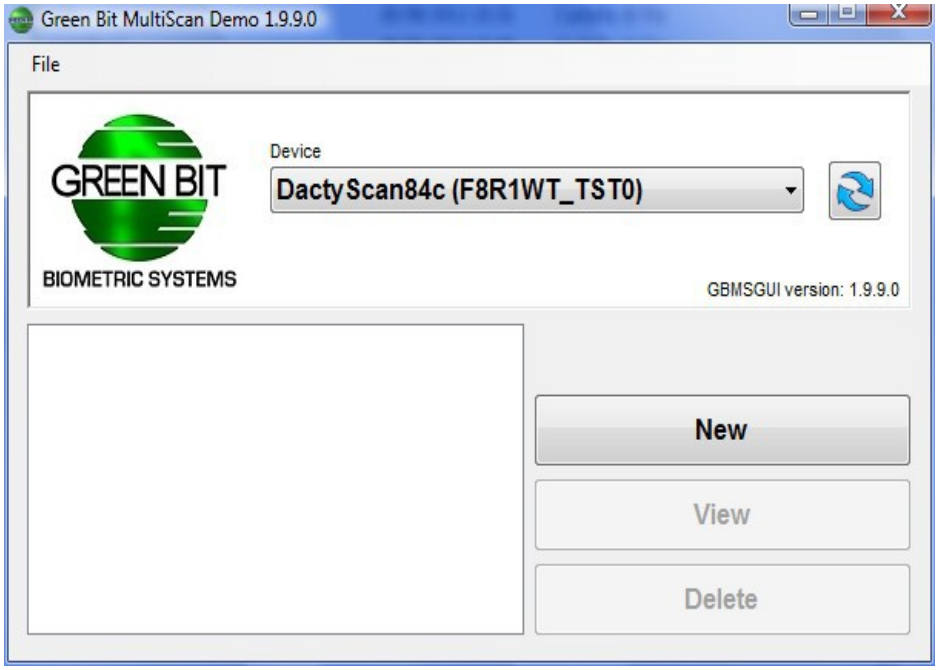


Figure 1 Start Acquisition Window

2.1.1 Refresh Button

This button allows to refresh the device list (for example it has to be used when a new scanner is plugged to the PC).

2.1.2 Scanner List

In this combo the list of the scanners plugged to the PC is displayed. When an item of this list is selected, the corresponding scanner is set as the acquisition device.

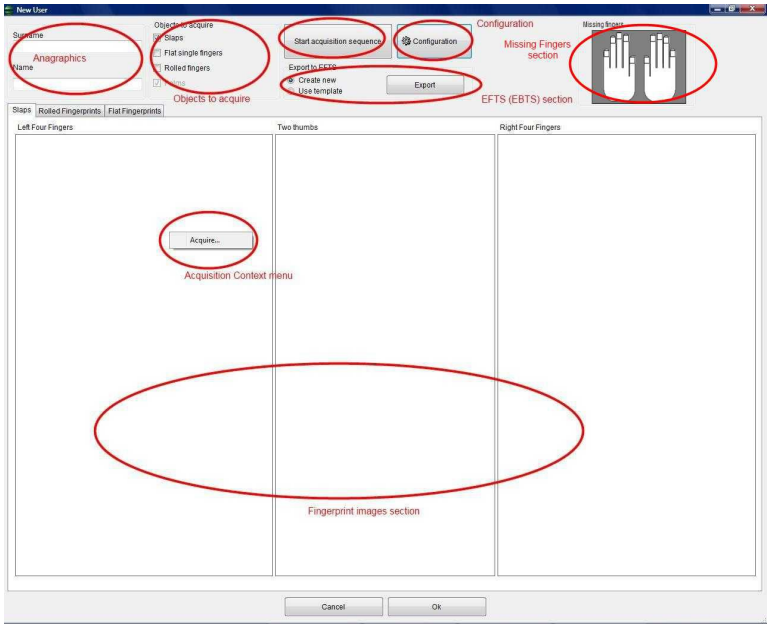
2.1.3 User control section

In this section three buttons are displayed, that allow a complete user management. The "New" button allows the creation of a new user, and opens the "Main acquisition window" that will be described in a following

chapter. The "View" button allows to show the information about the selected users in the "Users list", and the "Delete" button allows to delete the selected user from the list.

2.2 User information acquisition window description

In this chapter a description of the user information acquisition window will be given.



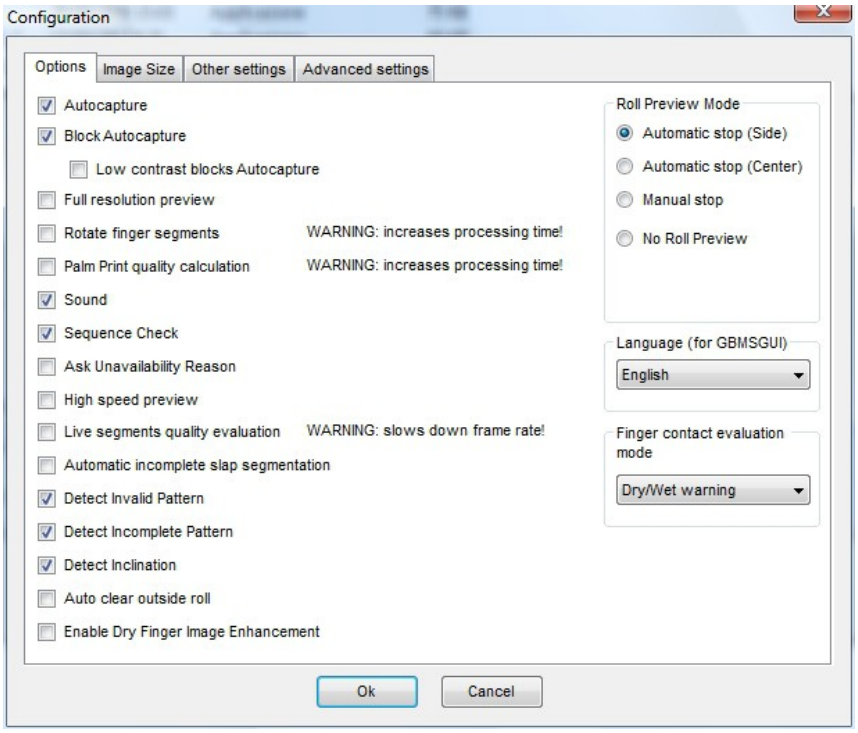
The "Anagraphics" section allows to edit anagraphic information about the user being created.
In the "Objects to acquire" section it's possible, by means of several check boxes (more than one at a time can be checked), the objects that have to be acquired.
The acquisition can be initiated by means of the "Start acquisition sequence" button pressure (in this case all of the objects specified in the "Objects to acquire" section will be acquired), or by means of the "Acquire" context item selection (in this case only an object will be acquired).
Acquired fingerprint images are shown in the "Fingerprint images section" (a tab for each object type).
Fingerprint images, together with some user information, can be stored into an ANSI/NIST ITL 1-2007 formatted file (see "EFTS-EBTS section"), starting from an existing file (by checking the "use template" radio button) or creating a new one (by checking the "Create new" radio button).

Working option can be set by means of the "Configuration" button, that opens a window described in the following chapter.
In the "missing fingers section" missing fingers can be selected before starting sequence, and this datum will be kept in count during segmentation.

2.3 Configuration window

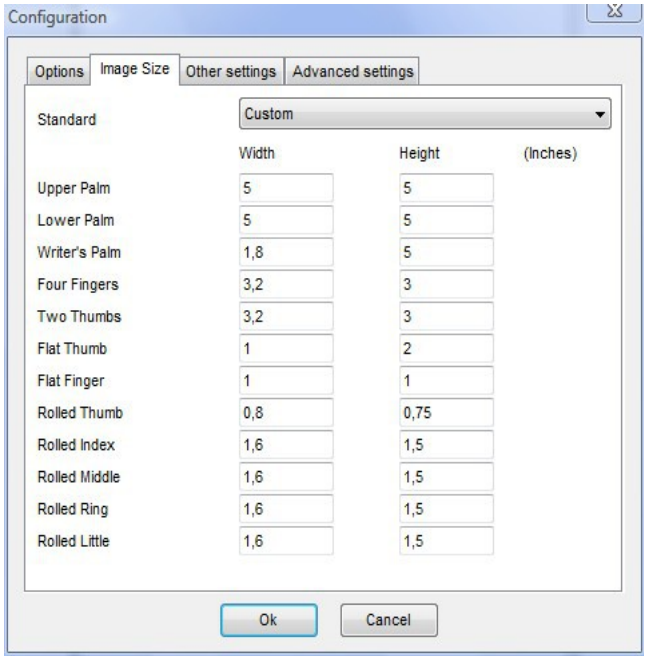
The configuration window is composed by several tabs, described in the next paragraphs.

2.3.1 "Options" tab



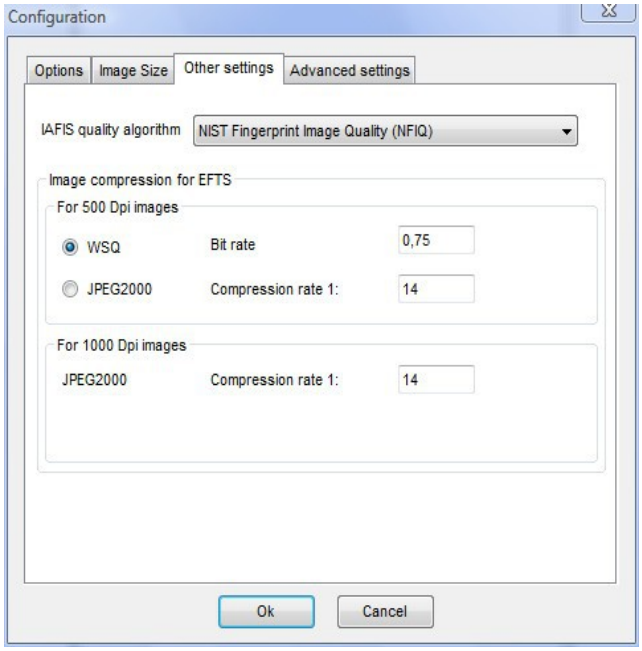
A lot of general options can be set/unset in this tab. For more information about them, see GBMSGUI documentation.

2.3.2 “Image Size” tab



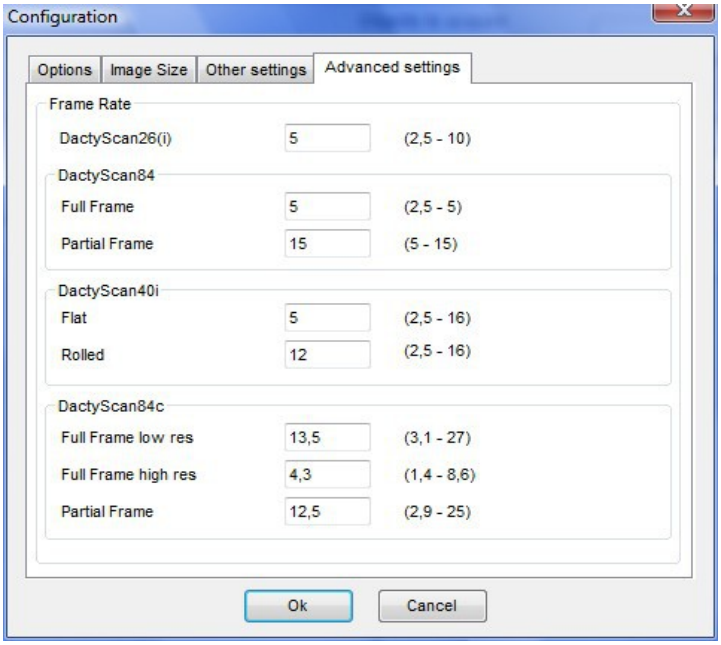
In this tab image size for each acquirable option can be set. Some pre-compiled settings are available (ANSI/NIST ITL 1-2007, for example), and they can be choosen by selecting an item in the “Standard” combo box.

2.3.3 “Other settings” tab



In this tab the algorithm for quality calculation (between NFIQ and Green Bit proprietary) and several compression options can be set.

2.3.4 “Advanced settings” tab



In this tab nominal frame rate can be set for those scanners allowing it.

Green Bit S.p.A.
Via Rivalta, 9
10095 Grugliasco (TO)
Tel: +39 011 7703811
Fax: +39 011 7703880
info@greenbit.com