



User Manual

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Publication

The descriptions, specifications, design and procedures contained in this manual were effective at the time of publication of this manual. Acuant reserves the right to modify any of the above at any time without notice and without incurring obligations.

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Getting Started

Before using the scanner

The application has been carefully packaged to avoid damage during transportation. Before operating the scanner, please remove the packaging materials. After removing the packaging materials, you will find the following:

- ScanShell® scanner
- CD of the application
- USB interface cable
- User license card
- Calibration card (only with ScanShell® 800/800N)
- Cleaning Sheet

Minimum system requirements

The minimum system requirements are:

- Pentium III with 128MB
- Windows 98 Second Edition or higher
- USB port
- 15MB free storage space

Connecting the scanner

The scanner is connected to the computer via the USB port. To connect the reader, do the following:

- Place the scanner on a flat, firm, solid surface with easy access.
- Plug the USB interface cable into the USB port of the computer
- After the Add new hardware wizard dialog box appears, click Next until you are asked to set the driver for the reader. You will find the driver on the Installation CD at:
 - <CD ROM drive>:\Scanner Driver\ScanShell800 (for scanner model ScanShell800)
 - <CD ROM drive>:\Scanner Driver\ScanShell800N (for scanner model ScanShell800N)
 - <CD ROM drive>:\Scanner Driver\ScanShell1000 (for scanner model ScanShell1000)
 - <CD ROM drive>:\Scanner Driver\MagShell900 (for magnetic reader model MagShell900)

After you specify the driver, click *Next* until the installation is complete.

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Installation

To install the software on the computer, do the following:

- 1. Close all programs.
- 2. Insert the CD into the CD ROM drive.
- 3. Wait until the install program begins and follow the instructions on the screen.
- 4. If the install program does not automatically start, click the My Computer icon on the desktop and then select the CD ROM drive.
- 5. Double click on the Setup program.

Once the **Setup** program starts, select the application name from the left list and click on the **Setup** icon. Enter your license key number when prompted, and follow the instructions.

Starting the Program

The very first time you start the program after installation, you will be prompted to enter your registration key. You will find your registration key sticker on the box of your ScanShell® scanner.

On the first time you start the program, you will also be prompted to check for new updates. Click *Yes* to let the program check for updates (make sure you are connected to the Internet at that time), or *No* to skip the update check and proceed to the program's main screen.

If you click **Yes**, the program will check for updates. If updates are found, you will be prompted to confirm download and installation. If you confirm, the program will download the most recent updates and install them automatically.

Uninstall

To uninstall the software, open the *Add-Remove Program* control panel. Select the Application icon and click on *Add/Remove*. Follow the uninstall instructions until the operation is completed.

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Introduction

idScan® scans various ID documents such as driver licenses and passports, and extracts the textual information as well as the document image into an external file, clipboard or third party software.

In addition, *idScan*® is capable of reading magnetic strips. With an outstanding card scanning and processing speed of up to 4 seconds per card, combined with a powerful OCR engine, *idScan*® is ideal for customer service offices, government agencies, various businesses, and third party kiosk applications.

When using the automatic page-feed detection, *idScan*® launches the scan job immediately upon the insertion of a document into the ScanShell® 800 scanner. In the ScanShell® 1000 scanner, the scan job is initiated by pressing any of the scanner buttons. The image is scanned and saved to the hard disk in a predefined color scheme, resolution, and scanning area, in a user-defined format (BMP, JPG, PCX, PNG, TIFF, TGA, PSD). The scanned image can also be rotated automatically, using predefined angles to obtain the proper orientation. *idScan*® offers three naming conventions to the saved images: fixed name, ascending numerator name, and naming according to the customer name as extracted from the ID card.

Full automation of the scan process allows the user to chain-feed the media to the ScanShell® 800 scanner while image processing takes place in the background.

The ScanShell® 800 scanner is capable of scanning any photo media due to its powerful scanning engine – including paper photos, ID cards, and even rigid plastic credit cards.

The ScanShell® 1000 scanner is designed for Passport reading but can also scan any 3" x 5" or smaller document including ID cards.

Magnetic strips

If a magnetic reader such as MagShell® 900 is connected to the computer, *idScan*® can read the magnetic strip of ID documents, and extracts the textual information stored on it into a file or the clipboard.

When reading magnetic strips, *idScan*® starts analyzing the data on the magnetic strip as soon as the document is swiped, and the data is saved in a text file. In magnetic reading mode, *idScan*® offers three naming conventions to the saved text data:

- Fixed file name
- Ascending numerator name (i.e. Card-0.txt, Card-1.txt, Card-2.txt...)
- Naming according to the customer name or ID Number, as extracted from the ID card.

Full automation of the process allows the user to chain-feed documents to the MagShell® reader while processing takes place in the background.

The MagShell® readers are capable of reading any AAMVA and ISO compliant Driver License with a magnetic strip.

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The Program Interface

The following figure shows the application main screen:



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Figure 1: Main Screen

The main screen controls

Always on Top: Toggles the application window between normal mode and always-on-top mode.

Help: Opens this help document.

Print Preview: Shows the scanned image and the data before printing.

Print: Prints the scanned image and the data.

Toggle Toolbar: Minimizes the application screen to display only a toolbar with the application controls, and restores the full application screen again.

Card Insertion Auto-Detect: Sets the automatic detection of card insertion on and off.

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Live Update: Updates your software with the most recent version, using the Internet.

Category: Driver License Category: Toggles between the available scanning modes according to document type and the scanner used, and sets the source for data detection accordingly. For more information on *idScan*® scanning modes please see *Program Operation, Page 12*.

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State: United States (auto detect) Driver's license country: Sets the card issuing country and state to be used for the OCR recognition template. In the case of the US only, you can select 'Auto Detect' (top of the list), which will enable the Driver license/business card option in the 'Category' field, or select a state manually from the state list. To select a country/state: Click on the arrow, and move the cursor over the desired region/country/ state in the popup menus that open.

Rotate Image: Rotates the image 90 degrees clockwise. This allows you to control the image orientation prior to saving.

Zoom Image: Click to enlarge the image for better reading.



Scan Image: Starts the image scan if using manual scan and the image source is set to scanner. Otherwise, activates the FILE OPEN dialog.

Note: 'Toggle to file' is possible only if a scanner is physically connected to the PC, or if the license key used is a temporary key.



Toggle Image Source: Sets the input image source to Scanner (ScanShell® 800 or ScanShell® 1000), Magnetic Strip, or an image file on the hard disk.

Scanner Connection: A green light indicates that the scanner is connected to the PC. A red light indicates that no scanner was found.

Delete Image: Deletes the scanned image. This gives you a way to control the image prior to saving.

Save to file

Save to File: Active only in manual save mode: Opens the SAVE AS dialog if file saving is enabled, or saves the file to the clipboard.

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Toggle Image Output: Active only in manual save mode: Sets the output destination to file or clipboard.

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License

Verification Card Verification: Activates the verification function.

• Verification Toggle Reference: Sets the reference source for card verification

purposes.

ocr A

Open OCR View: Opens extracted text view.



Open Configuration Dialog: Opens the configuration dialog screen in which all the application behavior can be set.

Exit

Exit / End of Scan: Used to close the application or to save the current image (used in automatic save mode only).

Saved images: 0/0

Background Save Progress (Status bar): Shows the background saving progress (used in automatic save mode only).

FTP Uploaded: 0/3 FTP Progress (Status bar): Shows the progress of FTP Export.

Detected State: Florida Detected State (Status bar): Displays the detected state when State Auto Detect is selected.



Device connection indicator: **Red** – device is not connected

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Program Operation

Overview

idScan® operation can be divided into six main operation categories:

- 1. Scanning and Image import
- 2. Saving and exporting data and images
- 3. Magnetic Strip reading
- 4. Extracted text manipulation and export
- 5. ID card Verification
- 6. Setting Image formats and other parameters

Image scanning and import – Images can be imported from two sources: from a scanner (ScanShell® 1000 or ScanShell® 800) or from an existing image file. When using the ScanShell® 800 scanner as the input source, you can choose between two operating modes: manual scan, i.e. each scan starts when the user places the card in the scanner and clicks on the *Scan* button, or auto-scan, i.e. the scan starts automatically when the user inserts the card into the scanner. When using the ScanShell® 1000 scanner, the scan starts as soon as one of the silver buttons on the scanner is pressed.

The text information in the imported image is extracted using one of two methods: Optical Character Recognition (OCR), in which the text is extracted directly from the scanned image, and Barcode reading, which extracts the data from a Barcode image. In both cases images are either scanned by the scanner or opened from a file.

Image export – Images can be exported to one of two destinations: An image file and the clipboard. When saving to an image file, the application offers two operating modes: manual save, i.e. the user clicks on the *Save* button to save the image using the *Save As* dialog box, and auto-save, i.e. the image is automatically saved to a predefined destination folder.

Magnetic Strip Detection - Available when a magnetic strip reader is connected to the computer and indicated in the *idScan*® application as the data source.

Extracted text export - Saves the detected text from the card / passport (name, ID number, address, etc.) to a user-defined text file. The text is saved in a records format of one record per line. The fields are separated by user defined separator characters.

ID Verification – Verification of the ID card authenticity by comparing two data sources, such as OCR and Barcode, OCR and magnetic strip information, etc.

Image format - Defines the way the input image is scanned (color scheme, resolution, scan size) and saving format (BMP, JPG, PCX, PNG, TIFF, TGA, PSD).



Scanning modes

idScan® has several scanning modes, available according to the scanner used.

Scanner support

<u>MagShell® scanners (magnetic readers)</u>: Support Driver License and General Document modes (if the documents have magnetic strips). General document (in magnetic mode) extracts data from magnetic strips of general documents (e.g., credit cards) and displays the text data as-is.

<u>ScanShell® 800N</u>: Supports barcode, business card and general non-OCR reading. <u>ScanShell® 800\1000</u>: Support all modes as follows:

- Driver License
- Business card
- Barcode
- Passport
- 2D barcode extracts the data form 2D barcodes
- 1D barcode extracts the data form 1D barcodes
- Checks

Scanning a new document

To scan a new document, simply feed the document into the scanner. If the scanner is set to automatic scan mode, the scanner will start scanning the card automatically. In manual scan mode, the scanner starts scanning when you click on the *Scan* button in the main screen. *See Paper Auto Detection Page<u>24</u>*. Once the scan is complete, the program will process the image. The scanned image and data will be saved according to the settings you specified in the configuration panel.

ID Data Scanning Mode

- 1. To scan a document in ID data scanning mode, select one of the following categories:
 - Driver License ID, Business card
 - Driver License ID
 - Passport
 - 2D Barcode
 - 1D Barcode
- 2. Scan the ID document using either auto detect or manual scanning mode.
- 3. After scanning and processing an ID card in one of the categories above, you can review the text data by opening the *ID Data* window. To open the *ID Data* window, press the *OCR* button on the main screen.

The *ID Data* window shows the data retrieved either by OCR (Optical Character Recognition) from a scanned image, from the scanned image Barcode, or from the document magnetic strip if a magnetic reader was used. The extraction method used depends on the selected category. Irrelevant fields are disabled (depending on the state). The data displayed in the *ID Data* window can be reviewed and



edited. Once a new ID card is scanned, this data is transferred to a text file (if this option is enabled).

ID Data	
State:	▼ United States (auto detect)
ID	
License	
Name	Middle
L. Name	Suffix
Address	
City	
State	ZIP
Issued	Expires
D.O.B	Class
	Exit Details >>

Figure 2: ID Data (Basic Mode)

The ID Data window can be viewed in three modes:

- Basic mode: Only the most important data is displayed.
- Detailed mode: Displays all the data on the card (click on the *Details* button).
- **Custom mode**: Allows you to customize user-defined fields and data (click on the *Custom* button), see *Custom fields User defined fields in the next page*.

You can toggle between the three modes using the *Basic / Details / Custom* buttons at the bottom of the *ID Data* window.

Editing data

You can edit data in the fields of the *ID Data* window. Note that the changes you make will be saved.

State: Select the card-issuing state manually from the dropdown list, or, in the case of the US, let the program detect the state automatically (By selecting 'United States' (auto detect) at the top of the countries list.

Custom fields - User defined fields

Custom fields can be useful for creating badges and other purposes.

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- Click on the 'OCR' button at the bottom left of the main screen.
- Click on the 'Details' button at the bottom left of the window that opens.
- Click on the 'Custom' button at the bottom left of the window that opens.
- Click on the 'Labels' button at the bottom of the window that opens to create a label for the field.

Custom Data Labels	
Badge	Add E dit Remove
Cancel	ОК

Figure 3: Cusotm fields creation window

- Click 'Add' and type in a name for the field.
- Repeat the process to create additional fields.
- Click *OK*. You will find new fields in the Custom fields' window. You can now type values or data into the field.

Editing and deleting custom fields

Repeat the process above. After the 'Add' window opens, select a label and click 'Edit' to change the field's name, or 'Remove' to remove it. When you are done, click OK.

ID data saving

Text data saving options are controlled from the configuration panel 'Data Extraction' tab. See 'License Text Export tab' Page <u>29</u>.

Business card and Check scanning mode

Business card and check scanning modes work in the same way as described above. However the data window that opens when clicking on the OCR button is different:



Figure 4: Business Card data window

Check Data	a View	×
Issuer	Issuing Bank	
Ammount	Date]
Check No.		
MICR]

Figure 5: Check data window

As in all other data windows, you can edit data in the fields, and your changes will be saved to the data file.

General Document Mode

The General Document Mode lets you scan a general document type and extract its text data. The data window displays the extracted text in raw format (not in fields). The data cannot be edited, however you can control the font used to display the data by clicking on the *Fonts* button and adjusting font parameters.

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Figure 6: General Document data window

In General Document scanning mode, both sides of a document can be scanned. Use the A/B button at the button of the window to view the two document sides.

scanning modes - Document type combination

Categories with combined document types perform the scan expecting the first document type specified in the category. If the data extracted does not match the first document type pattern, *idScan*® switches to the other document type specified in the category. For example:

Driver license ID/Business card: In this mode, ScanShell® scans a document assuming that the document is a driver license. If it is indeed a driver license, the process shows the license details (and exports the data). If the document is not a driver license, ScanShell® switches automatically to business card mode and attempts to process the scanned card as a business card. The progress of this process can be followed in the status bar at the bottom of the screen, which also indicates whether the card is being processed as a driver license or a business card.

Clicking the OCR button will open an appropriate window according to the document type detected; driver license details for scanned driver licenses and business card details if the document scanned was a business card.

Note: This option is only available if the United States (auto detection) option is selected in the 'State' field.

Business card detected successfully.

Saved images: 1/1

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Figure 7: Document type indication in the status bar

Reading Passports

Passports can only be scanned with the ScanShell® 1000 scanner. This scanner was designed specifically for reading / scanning passports; however, it can also be used for ID / Driver License reading / scanning.

Both Passport and ID cards should be placed on the glass of the scanner with the side to be scanned facing the glass.

When scanning ID cards, they should be placed on the top right corner as shown in the figure below.



Figure 8: ScanShell® 1000, ID placing

When scanning a passport, the entire glass surface $(3" \times 5")$ is being scanned unless the *idScan*® software is configured to scan only the data lines of the passport.

The proper way to scan a passport is to put the information page (the page that includes the person's picture) facing down on the glass, and the data lines (the lines at the bottom of the page) against the plastic frame closer to the ScanShell® 1000 logo as shown below.

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Figure 9: The placing of a passport

While using the ScanShell® 1000 scanner, you can assign a specific document category to each of the scanner buttons; see *Scanner button assignment*, <u>Page 25</u>. Once assigned, pressing one of the scanner buttons will initiate a scan in the assigned scanning mode.

Magnetic strips

Reading magnetic strips works in much the same way. The data is extracted as soon as you swipe a card through the magnetic reader.

Extracted text

The Extracted text can be saved in two ways:

- 1. Each record in its own text file.
- 2. Each record appended to the last record at a new line in the same text file.

Text file naming in auto save mode - Allows the user to choose between three types of file names:

- 1. Ascending file name (e.g. MyData-0.txt, MyData-01.txt, MyData-02.txt...).
- 2. Fixed file name: Each record will be saved with the same file name, either overwriting the previous file, or appending the new record as a new line in the same txt file according to user definition.
- 3. Person's name or ID number (as extracted from the magnetic strip): The text file name can be saved either under the name of the person or under the ID number in the data record.





Text File Delimiters - The delimiters are simply a way to indicate to the user or third party application, where each field starts and stops. *idScan*® allows three types of delimiters:

- 1. **Comma delimiter:** Each field is separated by a comma and looks as follows: ("DL number, First Name, Middle Name, Last Name, Address, City, State, Zip, Expire, DOB, Class, Eyes, Hair, Sex, Weight, Height, Restrictions, Endorsements").
- 2. Tab delimiter: Each field is separated by a tab and looks as follows:

("DL number	First Name		Middle Name	Last Name	
Address	City	State	Zip	Expire	DOB
Class	Eyes	Hair	Sex	Weight	
Height	Restrictions		Endorsements").		

 Custom character delimiter: Each field is separated by a user defined character; for example, the character "~" will look as follows: ("DL number~ First Name~ Middle Name~ Last Name~ Address~ City~ State~ Zip~ Expire~ DOB~ Class~ Eyes~ Hair~ Sex~ Weight~ Height~ Restrictions~ Endorsements").

MagShell® 900 Reader Operation

When the reader is in standby and ready to be used, it should have a steady green light indicator. The reading of a driver license can be done from right to left or from left to right (the reader is bi-directional). The magnetic strip should be down and facing the green light.

When the reading is successful the light will turn off for a second and one beep will sound. If the reading is unsuccessful the light will dim and several beeps will sound.

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ID Card authentication

Use this option to check if the card you are scanning is genuine. *idScanPro*® will scan the data on the card using OCR, and then compare it to data from a second source on the card, either the barcode or the magnetic strip (if available). If the data from the two sources match, the card is genuine. If not, the card is either fake, or one of the data sources on the card is corrupted.



To authenticate a card:

- 1. Select *Record* -> *New Record* from the menu bar or click on the *New Record* button from tool bar.
- 2. The New Record Screen will appear.
- 3. Select a state from the *State* dropdown list or use the *State Detect* option (for OCR). You are advised to select the state manually, because if the state is not recognized for some reason, you will have to repeat the process. You can also select a state from the quick state selection buttons, if you have predefined them. (To set a button for the desired state, right-click on the button. Select the desired state from the list. After you release the mouse button, you will notice that the button name has been changed to the state you selected).
- Use the popup menu of the card authentication button to select a second card data source (barcode or magnetic strip), which will be used for comparison with the OCR results.



- 5. Click on the *Card Authentication* button to start the authentication (When the authentication process is active, the icon on the button will flash, and if it is not active it will be black).
- 6. Place the ID card in the scanner.

If you are not using the *Auto detect card insertion* option: Click on the *Scan* button to scan the data source (This scan will be saved to the database if you save the record).

If you are using the *AutoDetect card insertion* mode, simply insert the card into the scanner

- 7. *idScan*® will scan the card, and then prompt you to scan the card a second time. Insert the card again in the scanner/reader and repeat the steps above.
- 8. If the data from the two sources on the card matched, the icon on the authentication button will be green. If it did not match, the icon will be red, which means the card is not in order, (either fake, or one of the data sources on the card is corrupted).
- 9. Press OK to save the record to database.



Understanding the authentication status light

The status light provides indications for the authentication process, as follows:

- Solid black color the authentication function is not activated.
- Solid brown color the authentication function is activated and is waiting for the reference scan or swipe.
- Flashing brown light the reference scan or swipe has been successful, waits for the scan of the source.
- Solid green color the source was scanned successfully and the authentication is successful (the data of the two sources match).
- Solid red color the source was scanned badly or the authentication has failed (the data of the two sources do not match).

What to do when verification fails?

If the status light remains solid red after the reference scan or swipe, it means that the data from the two sources do not match. The reason can be one of the following:

- 1. The card could be fake
- 2. Bad reading of either one of the sources
- 3. Corruption of one of the data sources

If verification fails, you can try the following:

- Make sure the current (US) State box is set to the correct state of the driver license.
- Try authenticating the card again.

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Configuring the Program

Before you start scanning, it is a good idea to configure the program's scanning and file saving options. Click on the '*Open configuration screen*' button in the main screen (See *Figure 1 Page 9*). The following configuration panel will be displayed:

	Scanner Configuration	
	Image Print Live Update Automation License text export OCR text export	
Image Source Section	 Data Source Scanner Image file Magnetic strip Paper auto detection Scanner button assignement 	
	 Manual save Save to clipboard Save to file Scan scheme Single side document Orientation Default save type bmp 	 Aanual File- ave Section
Auto File- Save Section	 Auto save Scan scheme Single side document File naming and type Save immediately after scan Rotate picture after scan in 	

Figure 10: Scanner configuration panel

The configuration panel's first tab is the *Automation tab*. Here you can set various parameters of scanning and saving data and images. The *Automation tab* consists of three main sections:

- Data source
- Manual file save
- Auto file save



Automation tab

Data Source

The *Data Source* section determines the data input source: Scanners, magnetic strip or image file.

Checking the 'Scanner' option does the following:

- Sets the scanner as the input image device.
- Sets the Scan button icon to a scanner image in the main screen.
- Enables the lower checkbox, titled 'Paper auto detection'.

Checking the 'Image File' option does the following:

- Sets the image source as a local image file from the hard disk.
- Sets the Scan button icon to an 'Open file' image in the main screen.
- Disables the lower checkbox, titled 'Paper auto detection'.

Checking the 'Magnetic Strip' option does the following:

- Sets the Magnetic Strip Reader as the input device.
- Sets the Scan button icon to a magnetic strip card image in the main screen.
- Disables the lower checkbox, titled 'Paper auto detection'.

Checking the 'Automatic scan size' option does the following: (This feature is available only if the ScanShell® 800\N scanner is connected!)

It allows for the scanning of undefined document sizes and continuous scan of the full length of the document. Once the scan is complete, the image is cropped automatically to its proper size. This feature is useful for scanning different documents of different sizes.

Paper auto detection - Checking this option will cause the scanner (ScanShell® 800) to auto-detect document insertion and start the scanning and saving process automatically. When using the ScanShell® 1000 scanner, any of the scanner buttons can be pressed to start the scan.

If the '*Paper auto detection*' is unchecked, the scanner starts scanning when you click on the *Scan* button in the main screen.

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Scanner button assignment

If you use the ScanShell® 1000 scanner, clicking the 'Scanner button assignment' will open the following window, allowing you to assign a specific document category to each of the scanner buttons.



Figure 11: ScanShell® 1000 button configuration

To configure the ScanShell® 1000 buttons:

- Select a document type from the dropdown list of the desired scanner button. Note that an arrow is marking the corresponding button in the picture.
- Click OK.
- Repeat the selection for the other buttons.

Note: The scanner button assignment option is available only if auto-detection is enabled.



Saving options

Once an image is imported, it can be saved to a file or to the clipboard. Images can be saved in two ways:

Manual save: The image is saved to the hard disk or to the clipboard as soon as the user clicks on the *Save* button or immediately after the scanning, depending on user settings.

Automatic save: The image is saved to the hard disk in a predefined directory. Saving can be performed as soon as scanning is complete, or when the next card scanning starts.

Image manual save

The scanned image can be saved manually either to a file on the hard disk, or to the clipboard. You select the file destination as follows:

Save to clipboard: To save the scanned image to the clipboard, check the 'Save to clipboard' checkbox (See Figure 2 Page <u>12</u>).

Note that the Save button in the main screen now displays a clipboard icon.

Save to file: To save the scanned image to a file, check the 'Save to file' checkbox (See Figure 2 Page <u>12</u>).

Note that the Save button in the main screen now displays a diskette icon.

Scan scheme: Select the desired saving scheme (single side, double side or two sides on the same image. If the latter is selected, you can specify the image layout by clicking on the *Orientation* button (Side A above B or B above A).

Default save type: Once *Save to File* is selected, you can set the default file format in which the file will be saved, by using the *Default save type* dropdown list. *idScan*® supports seven image file formats: BMP, JPG, PCX, PNG, TIFF, TGA, PSD.

Image auto save

Image auto save is particularly useful for large batch scanning jobs. This option enables chain-feeding the scanner while image saving is done automatically without user interference.

Scan scheme: Select the desired saving scheme (single side, double sided, or two sides on the same image). If the latter is selected, you can specify the image layout by clicking on the *Orientation* button (Side A above B or B above A).

Save immediately after scan - Checking the checkbox titled '*Save immediately after scan*' will save the image and data immediately after the scan is done.

If the 'Save immediately after scan' checkbox is unchecked, the saving will occur on the next scan job (in the automatic saving option) or when the user clicks on the Save button (in the manual saving option).

Once the '*Autosave*' checkbox is checked, the '*File naming and type*' button is enabled, and clicking on it opens the '*AutoSave file naming*' configuration dialog:

File Naming

Clicking on the '*File naming and type*' button will take you to the following configuration screen:

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Autosave setting		×
Driver's license images	General document images	
 Save to ascending 	g file name	
Save to fixed file r	ame	
🔘 Use time stamp as	file name	
O Save to file name	using extracted data from ID	
File name Image	0 bmp 🗸	
Path C:\DOCUME~	1\Idan\LOCALS~1\Temp	
Name example	\ldan\LOCALS~1\Temp\Image0.bmp	
ОК	Cancel Apply Help	

Figure 12: File naming configuration – Driver license

This dialog sets the naming properties of the automatically saved image files. The file destination folder can be typed into the *'File Path'*, or selected by clicking the *File Path* button. In the window that opens you can navigate to the directory in which you want to save the files. The file format may be one of seven supported formats (BMP, JPG, PCX, PNG, TIFF, TGA, PSD). You determine the file format in which the images will be saved by selecting the format extension in the *'File Extension'* combo box. The file name is determined by the 'Saving Types' radio buttons as follows:

Driver License images tab

Use this tab to specify driver license saving options.

- Save to ascending file name: The software will create a new file name for each saved file, based on a combination of the 'Base File Name' and the 'Name Index' that determines the value by which the index is increased for each file. For example, if the 'Base Name' is set to IMAGE and the 'Name Index' is set to 1, the first saved file name will be IMAGE1.BMP, the second saved file name will be IMAGE2.BMP, etc.
- Save to a fixed file name: This method saves the image to a fixed file name based on the value in the '*Base Name*'. Each new scan saves a new image file that is written over the previous scanned image file.
- Use file time stamp as file name: The image is named with the current time and date.
- Save to a file name using extracted data from ID: The image file name is based on the value of a selected field. Currently, the only option is to use the NAME field

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from the ID card. Accordingly, if the ID card belongs to JOHN SMITH, the saved file name will be JOHN SMITH.BMP.

- **File name:** Type in a name and select the start number with which the files are automatically numbered. Select the graphic file type to use. Click on Browse button left of the path field, to specify a path for the saved files.
- When you are done, click *Apply*.

General document images

Use this tab to specify general document saving options, See the paragraph above for explanations.

Autosave setting
Driver's license images General document images
Save to ascending file name
Save to fixed file name
🔘 Use time stamp as file name
File name Store 🚺 bmp 🗸
Path C:\DOCUME~1\Idan\LOCALS~1\Temp
Name example :\DOCUME~1\Idan\LOCALS~1\Temp\Store0.bmp
OK Cancel Apply Help

Figure 13: File naming configuration – General documents

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License Text Export tab

Scanner Configur	ation	×
Image	Print	Live Update
Automation	License text export	OCR text export
Image extr	action	
🗹 Extract full	image	
Extract fac	e image to file	
Extract sign	nature image to file	
💌 Export id data	to web	
Extract id data	to a file	
—— Fleld separa	ator In record	
 Comma del 	imited 💫 🔿 Tab delimited	
Custom cha	ar delimited	
— Text file	name	
C:\DOCUME	~1\Idan\LOCALS~1\Temp\Id	Text.
🗸 Append re	cords	
		OK Cancel

Figure 14: Scanner configuration panel - License data processing tab

- Extract full image: Extracts the complete ID card image and saves it as a separate file.
- **Extract face image**: Isolates the face image rectangle from the ID card image and saves it as a separate file.
- Extract signature image to file: Isolates the signature image rectangle from the ID card image and saves it as a separate file.
- **Export ID data to web**: Exports the scanned card data to a predefined web address according to the settings in the data.txt file.
- Extract ID data to a file: Extracts the textual information from the ID card image and saves it to a text file.

To activate these features, select the 'License text export' tab in the configuration panel, and check the appropriate checkboxes.

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Extract full image

The full card image is extracted from the ID image and saved to a file. The face image is saved under the ID image name (e.g. *c:/images/ID-1.bm*). To find out more about file naming methods, see the *Image manual save and Image auto-save sections on Page_26*.

Extract face image to file

The face image rectangle is extracted from the ID image and saved to a file. The face image is saved under the ID image name with the *.Face* extension (e.g. if the card image name is *c:/images/ID-1.bmp*, the face image is saved as *c:/images/ID-1-Face.bmp*). To find out more about file naming methods, see the *Image manual save and Image auto-save sections on Page_26*. The saved face image has the same properties as the ID card image (color scheme, resolution and file type).

To activate this feature, check the checkbox titled Extract face image to file.

Extract signature image to file

The signature image rectangle is extracted from the ID image and saved to a file. The signature image is saved under the ID image name with the *Sig* extension, e.g. if the card image name is *c:/images/ID-1.bmp*, the signature image is saved as *c:/images/ID-1-Sig.bmp*). The saved signature image has the same properties as the ID card image (color scheme, resolution and file type).

To activate this feature, check the checkbox titled *Extract signature image to file*.

Note: The signature extraction feature is currently not supported by all the states. Appendix A shows the states that support signature extraction.

Using the signature extraction feature in documents of states that do not support it yields no result.

Export id data to web

If you select this option, the scanned card data is exported automatically to a predefined web address, according to the settings in the data.txt file, located in the application (.exe file) directory.

Extract ID data to a file

The textual data is extracted from the ID image and saved to a user-selected text file. The data is organized in fields in a constant order separated by a unique character. The field separating character can be any of the following:

- Comma character "," (default).
- Tab character.
- Custom-defined character: any single character from the keyboard.

Each ID scan (record) is organized in a single line. Each record has the following organizational order:

ID number, License number, Name, Address, City, State, Zip, Issue date, Expiry date, Birth date, Sex, License class, Social security, ID image file name, First name, Middle name, Last name, Name suffix, Scan time, Scan date, Text line1, Text line2, Text line3.

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Note: For a full list of exported fields please see Appendix E – Full Export Fields List, Page 54.

Document type export strings

The document type is specified in the exported text file with the following (exact) strings:

- When scanning driver licenses using OCR, the last fields will contain the string: "Driver license (ocr)"
- When scanning driver licenses using barcode, the last fields will contain the string: "Driver license (barcode)"
- When scanning driver licenses using a magnetic reader, the last fields will contain the string: "Driver license (mag)"
- When scanning passports using OCR, the last fields will contain the string: "Passport (ocr)"
- When scanning business cards using OCR, the last fields will contain the string: "Business card (ocr)"

Notes:

- 1. If a specific field is not supported in the current state, its corresponding value is empty.
- 2. ID number and License number have the same value in the US.
- 3. *ID image file name* holds the full path and name of the ID card image file.
- 4. *First name, Middle name, Last name, Name suffix* fields are generated by parsing the *Name* field and not directly from the cards.
- 5. *Text lines 1-3* are extracted only for Chile driver licenses. These data fields are not extracted for other states or countries.

Important! This order is guaranteed to remain in this format in future versions of *idScan*®. However, this list may expand in the future to include additional fields, as more states are supported. These new fields will be added to the end of the list.

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Append records:

The records can be written to the text file in two ways:

- Appending mode: In this mode, each new record is appended to the end of the text as a new text line. To activate this mode, check the checkbox titled *Append Records*.
- **Single record mode**: In this mode, each new record overwrites the previous record; thus the text file always contains a single record. To activate this mode, uncheck the checkbox titled **Append Records**.

OCR text export tab

Scanner Configuration				
	Print	Live Update		
Automation	License text export	OCR text export		
Save the extracted text to a text file. The text file will be placed in the directory where the image files are saved, and will have the same name as the image file (ending with the .txt extension).				

Figure 15: Scanner configuration panel – OCR TEXT EXPORT tab

By checking the checkbox, text extracted from the scanned card will be saved to a text file, which will have the same name as the image file (ending with the .txt extension), and which will be placed in the directory where the image files are saved.



Image tab

The Image tab lets you set various image scanning parameters as follows:

Scanner Configuration	on	×		
Automation	License text export Print	OCR text export Live Update		
Passport size: Driver license size:	Full size (3"x5")	Custom		
Color scheme: Resolution:	True Color (24 bit)	vality: 75 🛟		
Width: 2.00"	cument dimensions Height: 3.60''			
Units: Inches Millimeters Driver's license image dimensions and size Width: 600 pixels Height: 1080 pixels Estimated file size (for bitmap format): 1,944,056 bytes				
Text Stamp	Clean Scanner	Calibrate		
OK Cancel				

Figure 16: Scanner configuration panel – Image tab

Document size: The document size determines the size of the scanned area. This area is defined by the width and height values, as shown in Figure 17 below using the ScanShell® 800 scanner:





Figure 17: Document Measurements

Passport size - the drop-down list offers the following options:

- Full size (3"x 5") Scan the full size of the document
- Data section only Scan only the data section of the document.

Driver License size - offers the following options:

- ID card (landscape)
- ID card (portrait)
- Photo size (3" x 5")
- Large Photo size (4" x 6")
- Custom size: offers variable scan sizes from (1.85" x 2") to (4.1" x 9") (W x H). If selected, the *Custom* button becomes available, allowing you to define the scanning area.
- AutoDetect size the application will attempt to detect the document size automatically.
- MRZ section only applicable to European documents. If selected, only the 2-3 MRZ lines at the bottom of the document are scanned.

Note: If the scan size is smaller than the actual document, the image will be cropped to the size defined by the scan size.

Color Scheme: Color scheme defines the number of colors used to display the image. In general, the higher the number of colors, the better and clearer the image is. However, please bear in mind that more colors result in a larger file size. *idScan*® offers the following color schemes:

True color: 24-bit color image

256 colors: 8-bit color image

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Full size (3"x5")	~
Full size (3"x5")	
Data section only	

ld card (landscape)	<
Id card (landscape)	
ld card (portrait)	
Photo size (3" x 5")	
Large photo size (4'' x 6'')	
Custom size	
Auto detect size	
MRZ section only	



256 shades of gray: 8-bit gray image

Black and white: 1-bit image

As mentioned above, more colors mean a larger image file size. The relation between color scheme and file size can be defined approximately as follows:

File size = 2^{number of bits}

Accordingly, if a certain document scanned in black and white format produces a file of 50KB, the same document produces an image file of 400KB when scanned in 256 colors (or gray scale), and 1.2 MB for true color.

Resolution: The resolution parameter defines how vividly the image will be displayed. In general, an image that is scanned in higher resolution shows more details of the original document image. However, as with the color scheme – higher resolution means a larger image file size. *idScan*® supports scanning resolutions in the range of 50 dpi to 600 dpi, in increments of 10 dpi.

idScan® calculates the approximate file size for bitmap format based on the current document size, color scheme and resolution. The result is displayed under '*Image dimensions and size*'.

JPEG Quality: Sets the image quality when saving in JPEG format. This value range can be between 11 and 100. 100 represents the best image quality, but would also result in the biggest file size.

Text Stamp

The text stamp window allows you to add an automatic text stamp to the scanned image. This window lets you insert a text string and control various text parameters.



Text stamp on image	×
Stamp text on image	
Text	
Fonts Opacity: -1	
Vertical position: 🔿 Top 🔿 Middle 🔿 Bottom	
Horizontal position: 🔿 Left 🔷 Middle 🔿 Right	
Example	
The Sumshine State LCOMENTANCE L252-784-65-554-1 BARRIE DRIVER LCEMSE L252-784-65-554-1 L252-784-65-554-1 L252-784-65-554-1 L252-784-65-554-1 L252-784-65-554-1 L252-784-65-554-1 BARRIE DRIVER L250-786-652 DRIVER L252-784-65-554-1 DRIVER L252-784-55-554-1 DRIVER L252-784-55-55-1 DRIVER L252-784-55-55-1 DRIVER L252-784-55-55-1 DRIVER L252-784-55-55-1 DRIVER L252-784-55-1 DRIVER L252-784-55-1 DRI	
Cancel OK	

Figure 18: Text stamp configuration window

Scanner Calibration

With time, the scanner's colors detection tends to change to incorrect values. This phenomenon affects the text detection accuracy as well as the resulted image quality. For detailed instructions on how to clean the scanner, see *Appendix C - Maintaining the scanner, Page 50*.

Cleaning the Scanner

Cleaning the scanner from time to time improves the scan quality. For detailed instructions on how to clean the scanner, see *Appendix C* - *Maintaining the scanner, Page 50*.

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Printing – Print tab

Image Print Size

Surprisingly, the printed image size depends very much on the graphic program used. In some low-end graphic applications (such as Microsoft Paint that comes with Windows), the printed image size depends on the image resolution. The more dpi, the larger the image size that will be printed. To get a properly printed image size, use a more professional graphic package (such as Adobe Photoshop) that prints the image in the correct dimensions regardless of the image dpi.

The Print tab has the following options:

Image Print Live Update Printed image is 100 region percent of actual size Print image immediately after each scan cycle
Print image immediately after each scan cycle
Show Print dialog before printing Margin Top: 250 Left: 250 Image Full image Print data from driver's license card Image Zp Icense Zp Name Issue date Address Expire date City Date of bith State Printing font Print Custom fields

Figure 19: Scanner configuration panel – Print tab

Image size as percent of actual size: Reduces / enlarges the image size from 50% to 200% of the actual document size. Selecting the default (100%) prints the image the same size as the document.

Print data from driver license card: Places the data from the card under the card image. The printed image and data fields can be selected using the appropriate check boxes.

Printing Font: Select the desired printing font parameters.

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Printing custom fields: Allows you to print custom, user defined fields. This is useful for creating and printing badges and for other purposes. Custom fields can be added in the OCR window, see *Custom fields - User defined fields, Page 14.*

Click on the 'Print custom fields' button.

Print Custom Fields	×
Printed custom fields	
Badge	
 Print label and data Print data only Clear custom data after print 	
Cancel OK	

Figure 20: Print custom fields dialog

- Select the fields you want to print.
- Select Print label and data or Print data only.
- If you check the 'Clear custom data' your custom fields will be deleted after printing (useful for a one-time extra marking of records).
- Click OK.



Live Update Tab

Live Update checks for updates whenever you are connected to the Internet, and updates your program automatically with the most recent available version of the program.

Note: If you do not configure your software for automatic Live Update, you can still update it manually using the Live Update button in the main screen.

To use the automatic Live Update feature, go to the Live Update tab in the configuration screen:

Scanner Configurati	on	
Automation	License text export	OCR text export
Image	Print	Live Update
Keep my program u is the most current	up to date by verifying th version.	at the software version
— Automatically o	check for new updates	
Every time the	program starts	
O Automatically c	heck for new updates	
Every Day	✓ At 1	2:00 AM 🗸
Set User Data	Ī	
		OK Cancel

Figure 21: Live Update tab

- 1. Check the Live Update checkbox.
- 2. Choose the updating frequency:
 - a. Every time the program is started (providing you are connected to the Internet)
 - b. At preset times Use the combo boxes to specify the updating frequency.

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3. Click on the 'Set User Data' button.

User Details	RegistrationWpdate		
*Licens /	ABC12345 jfk80DD IR		
Title		Job title	
First name		Middle name	
Last name			
Address1			
Address2			
City		State	
Zip		Country	United States 🛛 🗸
Phone		Fax	
*Email		*Company	
* Requeste	d data		
			Cancel OK

Figure 22: Live Update user details

4. Fill in your details.

Note: License, Email and company are obligatory and must be filled in.

5. Click 'OK'.



Appendix A – Supported States for Detection

The following table lists the countries and states supported by *idScan*®. This list will be updated in each new version release of *idScan*®.

Region Name	Regio n ID	Country Name	Country ID	Document\State Name	Docume nt \State ID
USA	0	USA	0		
				ALABAMA	0
				ALASKA	1
				ARIZONA	2
				ARKANSAS	3
				CALIFORNIA	4
				COLORADO	5
				CONNECTICUT	6
				DELAWARE	7
				FLORIDA	9
				GEORGIA	10
				HAWAII	54
				IDAHO	11
				ILLINOIS	12
				INDIANA	13
				IOWA	14
				KANSAS	15
				KENTUCKY	16
				LOUISIANA	17
				MAINE	18
				MARYLAND	19
				MASSACHUSETTS	20
				MICHIGAN	21
				MINNESOTA	22
				MISSISSIPPI	23
				MISSOURI	24
				MONTANA	25
				NEBRASKA	26
				NEVADA	27
				NEW HAMPSHIRE	28
				NEW JERSEY	29
				NEW MEXICO	30
				NEW YORK	31

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SASKATCHEWAN

				NORTH CAROLINA	32
				NORTH DAKOTA	33
				OHIO	34
				OKLAHOMA	35
				OREGON	36
				PENNSYLVANIA	37
				RHODE ISLAND	38
				SOUTH CAROLINA	39
				SOUTH DAKOTA	40
				TENNESSEE	41
				TEXAS	42
				US VIRGINISLANDS	91
				UTAH	43
				VERMONT	44
				VIRGINIA	45
				WASHINGTON	46
				WASHINGTON DC	8
				WEST VIRGINIA	47
				WISCONSIN	48
				WYOMING	49
				GREEN CARD	81
				ARMY CARD	82
				SSN CARD	83
				NYPD	84
				GUAM	86
				MEXICO USA	85
				TRIBAL	88
				FIPS ID	89
				PASSPORT CARD	92
CANADA	1	Canada	3		
				ALBERTA	71
				BRITISH COLUMBIA	72
				ONTARIO	70
				PRINCE EDWARD	880
				MANITOBA	73
				NEW BRUNSWICK	74
				NEW FOUNDLAND	75
				NW TERITORIES	76
				NOVASCOTIA	77
				QUEBEC	1079

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				CANADA CITIZEN ID	79
AMERICA	2				
		ANTIGUA	108	ANTIGUA	1160
		ARGENTINA	93	ARGENTINA	990
		ARUBA	118	ARUBA	1290
		BAHAMAS	21	BAHAMAS	250
		BARBADOS	133	BARBADOS	1440
		BELIZE	106	BELIZE	1120
		BERMUDA	13	BERMUDA	170
		BOLIVIA	60	BOLIVIA	670
		BRAZIL	8	BRAZIL	130
		CAYMAN ISLANDS	134	CAYMAN ISLANDS	1450
		CHILE	4	CHILE	80
		COLUMBIA	79	COLUMBIA	830
		COSTA RICA	28	COSTA RICA	320
		CUBA	135	CUBA	1460
		CURACAO	112	CURACAO	1200
		DOMINICAN_REPUB LIC	73	DOMINICAN_REPUBLIC	770
		ECUADOR	67	ECUADOR	710
		EL_SALVADOR	34	EL_SALVADOR	380
		FRENCH_GUIANA	136	FRENCH_GUIANA	1470
		GREENLAND	137	GREENLAND	1480
		GRENADA	138	GRENADA	1490
		GUYANA	139	GUYANA	1500
		GUATEMALA	33	GUATEMALA	370
		HAITI	74	HAITI	780
		HONDURAS	69	HONDURAS	730
		JAMAICA	140	JAMAICA	1510
		PARAGUAY	150	PARAGUAY	1520
		MEXICO	6	MEXICO	100
		NICARAGUA	32	NICARAGUA	360
		PANAMA	36	PANAMA	400
		PERU	29	PERU	330
		PUERTO_RICO	30	PUERTO_RICO	340
		ST_CHRIST_NEVIS	94	ST_CHRIST_NEVIS	1000
		SAINT_KITTS_NEV IS	160	SAINT_KITTS_NEVIS	1530
		SAINT_LUCIA	170	SAINT_LUCIA	1540
		SAINT_VINCENT_G RENADINES	180	SAINT_VINCENT_GRENA DINES	1550
		SURINAME	190	SURINAME	1560
		TRINIDAD	120	TRINIDAD	1310



		TURKS_CAICOS	103	TURKS_CAICOS	1090
		URUGUAY	200	URUGUAY	1570
		VENEZUELA	80	VENEZUELA	840
		VIRGINISLANDS	115	VIRGINISLANDS	1260
EUROPE	3				
		ALBANIA	95	ALBANIA	1010
		ANDORRA	88	ANDORRA	940
		ARMENIA	128	ARMENIA	1390
		AUSTRIA	57	AUSTRIA	640
		AZERBAIJAN	113	AZERBAIJAN	1240
		BELARUS	125	BELARUS	1360
		BELGIUM	38	BELGIUM	420
		BOSNIA	48	BOSNIA	530
		BULGARIA	45	BULGARIA	490
		CROATIA	41	CROATIA	450
		CYPRUS	76	CYPRUS	800
		CZECH	47	CZECH	520
		DENMARK	72	DENMARK	760
		ESTONIA	71	ESTONIA	750
		FINLAND	64	FINLAND	690
		FRANCE	5	FRANCE	90
		EUROPE_GENERAL_ CARDS	46	EUROPE_GENERAL_CARD S	510
		GERMANY	10	GERMAN_ID	140
				GERMAN_LIC	141
		EUR_GEORGIA	126	EUR_GEORGIA	1370
		GREECE	121	GREECE	1320
		GUERNSEY	89	GUERNSEY	950
		HOLAND	17	HOLAND	210
		HUNGARY	49	HUNGARY	540
		ISLAND	78	ISLAND	820
		IRELAND	54	IRELAND	600
		ISLE_OF_MAN	90	ISLE_OF_MAN	960
		ISRAEL	9	ISRAEL	120
		ITALY	23	ITALY	270
		KOSOVO	51	KOSOVO	560
		LATVIA	91	LATVIA	970
		LIECHTENSTEIN	63	LIECHTENSTEIN	680
		LITHUANIA	19	LITHUANIA	230
		LUX	18	LUX	220
		MACEDONIA	100	MACEDONIA	1060
		MALTA	92	MALTA	980

		MOLDOVA	105	MOLDOVA	1110
		MONACO	129	MONACO	1400
		MONTENEGRO	97	MONTENEGRO	1030
		NORWAY	15	NORWAY	190
		POLAND	27	POLAND	310
		PORTUGAL	31	PORTUGAL	350
		ROMANIA	12	ROMANIA	160
		RUSSIA	58	RUSSIA	650
		SAN_MARINO	130	SAN_MARINO	1410
		SERBIA	59	SERBIA	660
		SLOVAKIA	50	SLOVAKIA	550
		SLOVENIA	53	SLOVENIA	580
		SPAIN	11	SPAIN	150
		SWEDEN	22	SWEDEN	260
		SWISS	20	SWISS	240
		TURKEY	25	TURKEY	290
		UKRAINE	131	UKRAINE	1420
		UNITED_KINGDOM	7	UNITED_KINGDOM AND IRELAND	110
		UZBEKISTAN	127	UZBEKISTAN	1380
		VATICAN	132	VATICAN	1430
AUSTRALIA	4				
				NSW	50
				ACT	51
				QLD	52
				TAS	55
				VIC	53
				WST	56
				SA	57
				NT	58
				COOK ISLANDS	59
				FIJI	61
				KEYPASS	500
				NEWZEALAND (AU)	2290
ASIA	5				
		AFGHANISTAN	970	AFGHANISTAN	2040
		BAHRAIN	56	BAHRAIN	620
		BANGLADESH	680	BANGLADESH	2050
			680 690	BANGLADESH BHUTAN	2050 2060
		BANGLADESH			

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		CHINA	42	CHINA	470
			43		470
		EAST_TIMOR	710	EAST_TIMOR	2080
		ISRAEL_DOCS	107	ISRAEL_DOCS	1130-
			04		1146
		INDIA	81	INDIA	850
		INDONESIA	37	INDONESIA	410
		IRAN	720	IRAN	2090
		IRAQ	111	IRAQ	1190
		JAPAN	730	JAPAN	2100
		JORDAN	740	JORDAN	2110
		KAZAKHSTAN	750	KAZAKHSTAN	2120
		KUWAIT	116	KUWAIT	1270
		KYRGYZSTAN	760	KYRGYZSTAN	2130
		LAOS	770	LAOS	2140
		LEBANON	780	LEBANON	2150
		MALAYSIA	2	MALAYSIA	60
		MALDIVES	790	MALDIVES	2160
		MONGOLIA	800	MONGOLIA	2170
		MYANMAR	810	MYANMAR	2180
		NEPAL	820	NEPAL	2190
		New ZELAND	16	New ZELAND	200
		NORTH_KOREA	830	NORTH_KOREA	2200
		OMAN	85	OMAN	900
		PAKISTAN	840	PAKISTAN	2210
		PHILIPPINES	102	PHILIPPINES	1080
		QATAR	86	QATAR	910
		SAUDI_ARABIA	87	SAUDI_ARABIA	930
		SINGAPORE	14	SINGAPORE	180
		SOUTH_KOREA	850	SOUTH_KOREA	2220
		SRI_LANKA	860	SRI_LANKA	2230
		SYRIA	870	SYRIA	2240
		TAJIKISTAN	880	TAJIKISTAN	2250
		THAILAND	104	THAILAND	1100
		TURKMENISTAN	890	TURKMENISTAN	2260
		UAE	55	UAE	610
		VIETNAM	900	VIETNAM	2270
		YEMEN	910	YEMEN	2280
AFRICA	6				
		ALGERIA	210	ALGERIA	1580
		ANGOLA	220	ANGOLA	1590
		BENIN	230	BENIN	1600
		BOTSWANA	240	BOTSWANA	1610





BURKINA_FASO	250	BURKINA_FASO	1620
BURUNDI	260	BURUNDI	1630
CAMEROON	124	CAMEROON	1350
CAPE_VERDE	270	CAPE_VERDE	1640
CENTRAL_AFRICAN _REPUBLIC	280	CENTRAL_AFRICAN_REP UBLIC	1650
CHAD	290	CHAD	1660
COMOROS	300	COMOROS	1670
REPUBLIC_OF_THE _CONGO	310	REPUBLIC_OF_THE_CON GO	1680
DEMOCRATIC_REPU BLIC_OF_THE_CON GO	320	DEMOCRATIC_REPUBLIC _OF_THE_CONGO	1690
DJIBOUTI	330	DJIBOUTI	1700
EGYPT	340	EGYPT	1710
EQUATORIAL_GUIN EA	350	EQUATORIAL_GUINEA	1720
ERITREA	360	ERITREA	1730
ETHIOPIA	370	ETHIOPIA	1740
IVORY_COAST	114	IVORY_COAST	1250
GABON	380	GABON	1750
THEGAMBIA	390	THEGAMBIA	1760
GHANA	400	GHANA	1770
GUINEA	410	GUINEA	1780
GUINEA_BISSAU	420	GUINEA_BISSAU	1790
KENYA	98	KENYA	1040
LESOTHO	430	LESOTHO	1800
LIBERIA	440	LIBERIA	1810
LIBYA	450	LIBYA	1820
MADAGASCAR	460	MADAGASCAR	1830
MALAWI	470	MALAWI	1840
MALI	480	MALI	1850
MAURITANIA	123	MAURITANIA	1340
MAURITIU	490	MAURITIU	1860
MOROCCO	101	MOROCCO	1070
MOZAMBIQUE	500	MOZAMBIQUE	1870
NAMIBIA	82	NAMIBIA	860
NIGER	510	NIGER	1880
NIGERIA	99	NIGERIA	1050
RWANDA	520	RWANDA	1890
SAO_TOME_AND_PR INCIPE	530	SAO_TOME_AND_PRINCI PE	1900
SENEGAL	540	SENEGAL	1910
SEYCHELLES	550	SEYCHELLES	1920
SIERRA_LEONE	560	SIERRA_LEONE	1930

		SOMALIA	570	SOMALIA	1940
		SOUTH_AFRICA	35	SOUTH_AFRICA	390
		SUDAN	580	SUDAN	1950
		SWAZILAND	590	SWAZILAND	1960
		TANZANIA	600	TANZANIA	1970
		TOGO	610	TOGO	1980
		TUNISIA	620	TUNISIA	1990
		UGANDA	630	UGANDA	2000
		WESTERN_SAHARA	640	WESTERN_SAHARA	2010
		ZAIRE	650	ZAIRE	2020
		ZAMBIA	83	ZAMBIA	870
		ZIMBABWE	660	ZIMBABWE	2030
GENERAL_DOC	7				
		UNIVERSITY_USA	24	Student Id (UMASS,	280
				Boston Un., Emerson	
				Clg., Harvard Un.,	
				Northeastern Un.,	
				Suffolk Un.)	
		EMPLOYMENT_CARD	26	EMPLOYMENT_CARDS	300
		SERVICE_CARDS	39	SERVICE_CARDS	430
		ENTERTAINMENT_C ARDS	40	ENTERTAINMENT_CARDS	440
		USAPILOTS_CARDS	42	USAPILOTS_CARDS	460
		ACCESS_CARDS	44	ACCESS_CARDS	450
		OCB_CARDS	52	OCB_CARDS	570
		SPAIN_POLICE_CA RDS	61	SPAIN_POLICE_CARDS	630
		EHIC_CARDS	65	EHIC_CARDS	700
		SCSIUSAC_CARDS	70	SCSIUSAC_CARDS	740
		USAA_CARDS	75	USAA_CARDS	790
		AMPORT_CARDS	77	AMPORT_CARDS	810
		PH_CARDS_CARDS	84	PH_CARDS_CARDS	890
		IRELAND_FIREARM _CARDS	96	IRELAND_FIREARM_CAR DS	1020
		_ TUNISIA_ELECTIO N_CARDS	109	TUNISIA_ELECTION_CA RDS	1170
		BEAUCE_CARDS	110	BEAUCE_CARDS	1180
		INTERPOL_CARDS	117	INTERPOL_CARDS	1280
		T_MOBILE_CARDS	119	T_MOBILE_CARDS	1300
		EASYPAY_CARDS	122	EASYPAY_CARDS	1330





Appendix B – Supported Scanners

Before using *idScan*®, the scanner driver must be installed. *idScan*® can work with the following scanner types:

- ScanShell® 800: Driver for the scanner can be found at http://www.id-scan.com/FTP/Scanner_Drivers/scanshell800
- ScanShell® 900: Driver for the scanner can be found at http://www.id-scan.com/FTP/Scanner_Drivers/MagShell900
- ScanShell® 1000: Driver for the scanner can be found at http://www.id-scan.com/FTP/Scanner_Drivers/ScanShell1000
- ScanShell® 600, USB 201: Driver for the scanner can be found at http://www.ID-scan.com/FTP/Scanner Drivers/USB 201



Appendix C - Maintaining the scanner

Calibrating the scanner

With time, the scanner's colors detection tends to change to incorrect values. This phenomenon affects the text detection accuracy as well as the resulted image quality. To reset the scanner to the proper colors, the scanner needs to be calibrated.

How to Calibrate?

To calibrate the ScanShell® 800 scanner, open the configuration panel's Image tab, insert the calibration paper card that was part of the scanner package into the scanner, and click on the *Calibrate* button. The ScanShell® 1000 does not require a calibration paper, so simply click on the *Calibrate* button.

Cleaning the scanner

Cleaning the scanner improves the scan quality.

How to clean the scanner:

Open the configuration panel's Image tab, and click on the "Clean Scanner" button. Follow the Cleaning Wizard instructions. This operation requires a cleaning sheet (supplied with the scanner) and alcohol solution.

<u>Scanner model ScanShell® 800/800N</u>: Place the cleaning sheet (supplied with the scanner) in the scanner tray, and click on the *Clean Scanner* button. The sheet is fed back and forth through the scanner and cleans the scanner lens. Add a few drops of alcohol for better results.

<u>Scanner model ScanShell® 1000</u>: Use a soft cloth to clean the scanner glass surface.

<u>Scanner model ScanShell® 600</u>: Unscrew the scanner cover (the screw is located on the bottom of the device). Use a soft cloth to clean the scanner lens.



Appendix D - Minimized Interface Mode & Command Line Switches

The *idScan*® application behavior can be modified to best suit your needs. This is done by running the program while using command line switches. *idScan*® offers the following switches:

MI – Runs the application with minimum amount of control buttons on the main screen and eliminates access to the configuration dialog screens.

ShowGUI – When using the system tray icon, this switch adds the option to show/hide the application main screen from the system tray.

NOMAG – Eliminates the use of the magnetic strip engine. Using this option speeds up the application start-up.

Using the command line switches

To use the command line switch, add the switch to the application shortcut as follows:

Assuming that you have a shortcut to *idScan*® on your desktop and you want to add the MI switch to the program that will cause it to run in minimized mode:

- 1. Right click on the shortcut and select Properties.
- Modify the TARGET field from "F:\Program Files\Card Scanning Solutions\idScanOCR Ver. 6.3.0\IDScanOCR.exe" to: "F:\Program Files\Card Scanning Solutions\idScanOCR Ver. 6.3.0\IDScanOCR.exe" /MI
- 3. Click OK to close the properties dialog.

Important: Make sure you type the switch value *after* the double quote character!

You can add several switches one after the other as follows:

"F:\Program Files\Card Scanning Solutions\idScanOCR Ver. 6.3.0\IDScanOCR.exe" /MI /NOMAG /ShowGUI

Running in Minimized Interface mode

Running in *Minimized Interface* mode displays the program with a minimum set of controls, thus preventing the user from altering the program configuration. Nevertheless, this operating mode allows the user to take full advantage of all the features embedded in the program.

To run in *Minimized Interface* mode, the program needs to be started with the /MI switch. To do so, change the program shortcut used to start the program from

"C:\Program Files\Card Scanning Solutions\...\IDScanOCR.exe" to:

"C:\Program Files\Card Scanning Solutions\...\IDScanOCR.exe" /MI

This alters the program main screen as follows:

Smart from the start



Scan	rhell Ready		Exit
			_
3 6 4		State: 🔽 United	I States (auto detect)
9 idScan	Barcode		
_			

Figure 23: Main screen in minimized mode

Main screen function controls:

- Help: Opens this help document.
- Calibrate Scanner: Activates the scanner's Calibration Wizard.
- Clean: Activates the scanner's Cleaning Wizard.
- **Country list**: Selects the current country. If the current country contains several states, the state list is loaded to the State List control.
- State List: Sets the current country and state detection algorithm.
- Exit: Closes the application.
- Scanner connection status: Indicates if the scanner is connected to the PC.

Smart from the start



Note: All the settings described in previous sections of this document apply when running in Minimized Interface mode.

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Smart from the start



Appendix E – Full Export Fields List

The full list of fields exported from *idScan*® (in this order). Total: 141 fields.

- 0. ID
- 1. License
- 2. Name
- 3. Address
- 4. City
- 5. State
- 6. Zip
- 7. Issued
- 8. Expired
- 9. Dob
- 10. Sex
- 11. Class
- 12. SocialSecurity
- 13. estFile
- 14. NameF
- 15. NameM
- 16. NameL
- 17. NameS
- 18. TimeStamp
- 19. Text1
- 20. Text2
- 21. Eyes
- 22. Hair
- 23. Height
- 24. Weight
- 25. Rest
- 26. Type
- 27. End
- 28. Audit
- 29. IssueCountry



30. Nationality

- 31. PersonalNumber
- 32. County
- 33. Address2
- 34. Address3 35. Address4
- 00.710010004
- 36. Address5
- 37. Address6
- 38. Custom0
- 39. Custom1
- 40. Custom2
- 41. Custom3
- 42. Custom4
- 43. Custom5
- 44. Custom6
- 45. Custom7
- 46. Custom8
- 47. Custom9
- 48. Duplicate
- 49. Title
- 50. Company
- 51. Country
- 52. City2
- 53. State2
- 54. Zip2
- 55. Country2
- 56. City3
- 57. State3
- 58. Zip3
- 59. Country3
- 60. City4
- 61. State4

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62. Zip4

63. Country4

64. PhoneLabel0

65. Phone0

66. PhoneLabel1

67. Phone1

68. PhoneLabel2

69. Phone2

70. PhoneLabel3

71. Phone3

72. PhoneLabel4

73. Phone4

74. FaxLabel0

75. Fax0

76. FaxLabel1

77. Fax1

78. FaxLabel2

79. Fax2

80. FaxLabel3

81. Fax3

82. EmailLabel0

83. Email0

84. EmailLabel1

85. Email1

86. EmailLabel2

87. Email2

88. EmailLabel3

89. Email3

90. WebLabel0

91. Web0

92. WebLabel1

93. Web1

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94. WebLabel2

- 95. Web2
- 96. WebLabel3
- 97. Web3
- 98. RecentDocType
- 99. Text3
- 100. IdCountry
- 101. CheckAmmount
- 102. CheckDate
- 103. CheckIssue
- 104. CheckIssueBank
- 105. CheckMicr
- 106. CheckNum
- 107. CheckRouting
- 108. CheckAccount
- 109. CheckSigNum
- 110. Original
- 111. Issued (year in 4 digits)
- 112. Expired (year in 4 digits)
- 113. DOB (year in 4 digits)
- 114. 1D Barcode
- 115. License (Barcode)
- 116. Full Name(Barcode)
- 117. First Name (Barcode)
- 118. Middle Name (Barcode)
- 119. Last Name (Barcode)
- 120. Suffix Name (Barcode)
- 121. Address (Barcode)
- 122. City (Barcode)
- 123. State (Barcode)
- 124. Class (Barcode)
- 125. Zip (Barcode)

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126. Date of birth (Barcode)

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- 127. Expire date(Barcode)
- 128. Issue date (Barcode)
- 129. Social Security (Barcode)
- 130. Sex (Barcode)
- 131. Endorsements (Barcode)
- 132. Eyes (Barcode)
- 133. Hair (Barcode)
- 134. Height (Barcode)
- 135. Weight (Barcode)
- 136. BizRawAddress1
- 137. BizRawAddress2
- 138. BizRawAddress3
- 139. BizRawAddress4
- 140. NameF (Not from MRZ)
- 141. NameL (Not from MRZ)

Smart from the start