

Smart ID

User Manual

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1. Getting Started

The following instructions tell you about minimum system requirements, how to install the Smart ID Software running Windows XP or later and start the program for the first time.

System Requirements

The recommended software and hardware configuration for your computer system to run the Smart ID Software is:

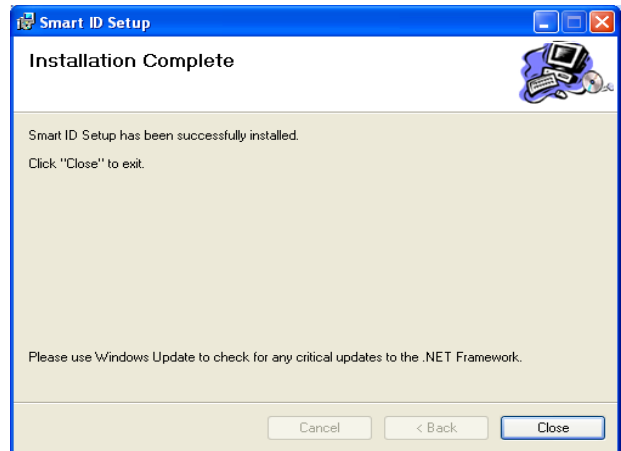
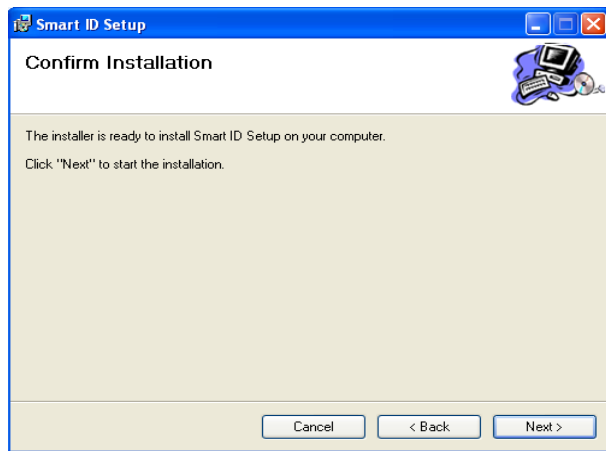
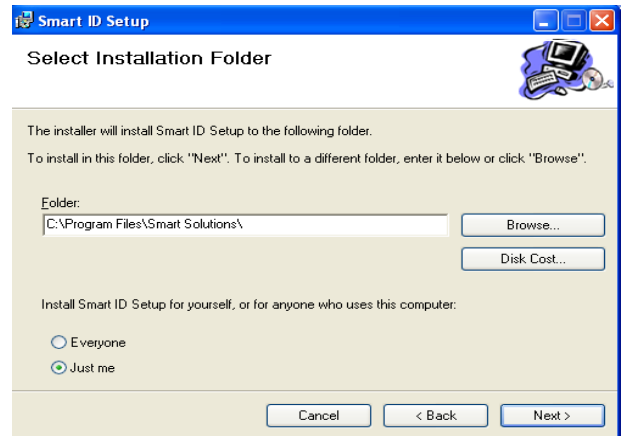
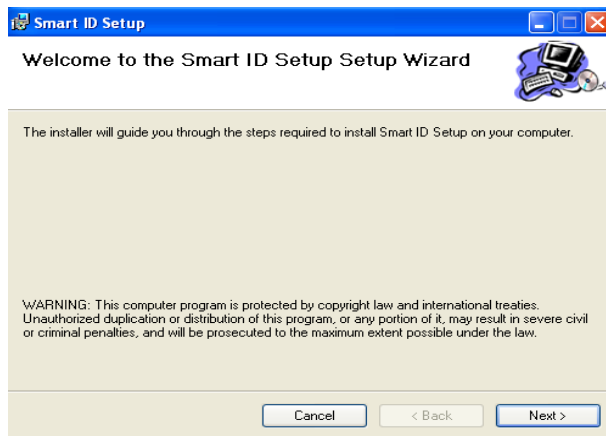
- PC with a Pentium 4 or higher microprocessor.
- 512 MB RAM.
- Hard Disk with at least 100MB free disk space.
- 20 KB per person
- One CD-ROM 8X speed drive.
- VGA or SVGA graphics adapter and monitor.
- 800 x 600 Screen resolution
- Mouse or other Windows-compatible pointing device.
- Serial port.
- Any ID card printer

Installation

Microsoft Windows XP or later is required to install and run the Smart ID Software. You can run the Smart ID Software on any system that can run Windows Vista, if the system has enough RAM and hard disk space. If Windows Vista is not installed, run the setup program for Windows before trying to install the Smart ID Software.

Running Setup on Windows XP or Later:

Insert the Card Software CD-ROM in your CD-ROM drive. The Smart ID Software Setup Screen appears after a few moments. If the Card Software Setup Screen does not show up automatically then go to CD-ROM drive and double click the Setup icon and follow the Setup instructions.



Note:

In case your system is unable to locate Dongle driver during software installation. Then you need to run and install it manually by clicking C:\Program Files\Smart Solutions\Smart ID\Hardware\Install.exe

2.Using the Smart ID Software

Login Screen:



Login

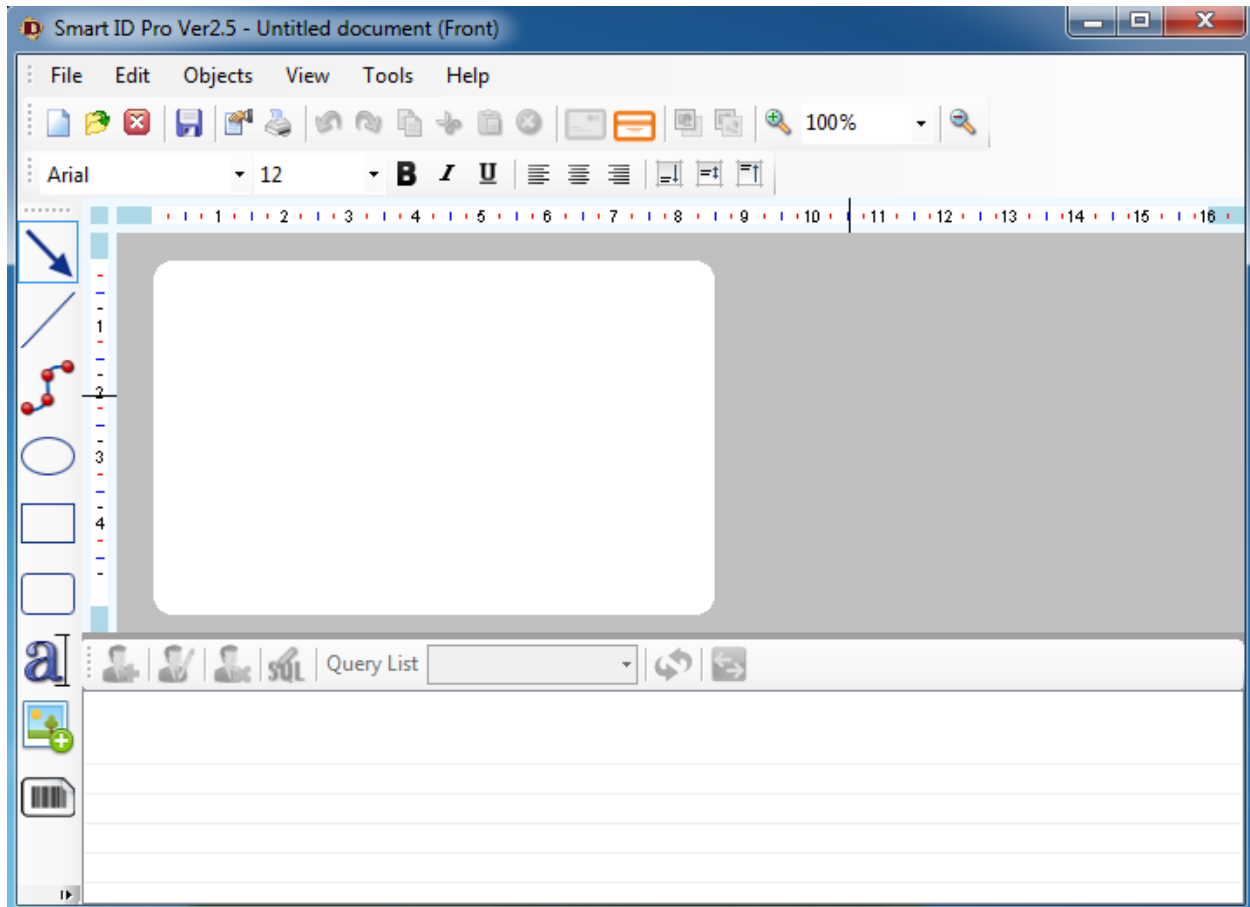
User Name

Password

To Login, please enter your username and password assigned by administrator. The default username is **Admin** and password is **admin**.

The Main Smart ID Window

The main Smart ID Software window, with its accompanying toolbars and menus, closely resembles the windows you work in for other Windows based programs. You will be working in the main window (and its sub-windows) as you design and print your cards. By default the application will be in design mode.



The Rulers:

Smart ID Software includes Rulers to help you align your artwork and arrange image elements symmetrically. Rulers are configured to display inches or centimeters. To display the rulers, choose **Rulers** from the View menu. To hide the rulers, choose **Rulers** from the View menu again.

The Grid:

A visible network of lines covering the card. As you draw objects, they will co-interact with the grid. You can turn it on and off using the **Grid** command from the View menu.

Drawing Toolbar:

The Drawing toolbar provide you with one-step access to lots of tasks. You can draw a rectangle, place a photograph, define a bar code, edit text and much more - all with just one **click** of a mouse button on one of Smart ID Drawing tools.

The Status Bar:

The Status Bar represents the cursor position within the card document. You can turn it on and off using the **Status Bar** command from the View menu.

Creating Card Layout

This section explains the procedures for opening existing card files, saving your work and creating the layout of a new card.

Opening and Saving Card Files:

You'll find that opening and saving your card files are pretty much the same as in other Windows programs.

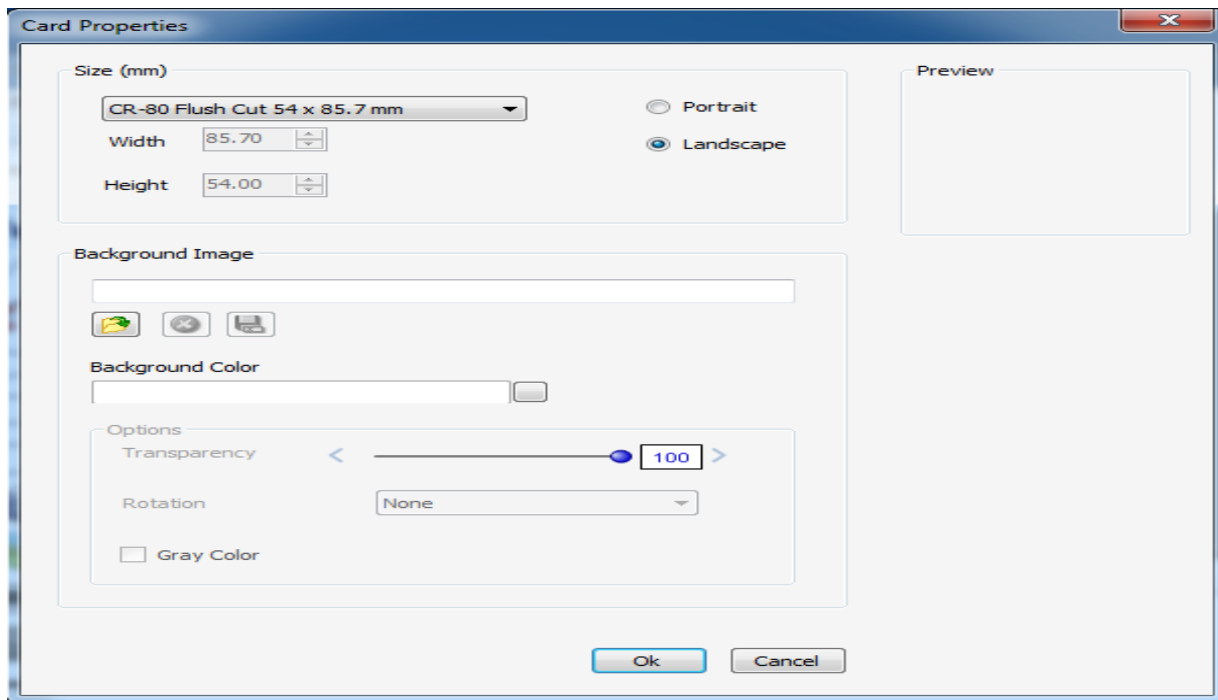
To create a new card at any time, **click** the **New** button on the Standard toolbar. To quickly open one of the last cards you worked on, choose it from the list of recently used files at the bottom of the File menu.

To open an existing card, **click** the **Open** button on the upper toolbar. When the Open dialog box appears, select the document in the File Name box, and then **click OK**.

To save a card on disk, **click** the **Save** button on the Standard tool bar. When you save a card for the first time, the Card Software displays the Save As dialog box so that you can type a name for the card file.

Card Properties:

A card can be created in either portrait (print across the narrow side of the card) or landscape (print across the wide side of the card) orientation. The card defaults to landscape orientation. The card orientation can be changed at any time



This above screen i.e. Card Properties will be prompted whenever you choose to create a New card by clicking **New** button on the standard toolbar or by selecting New from the File menu.

To change the card properties of an already existing card, you just need to double click on the card layout or click the Properties button on the standard toolbar.

In the Card Properties you can set card size, background colour, background image and transparency level options.

Adding a Line:



To add a horizontal or vertical line

1. On the Drawing toolbar, **click** the **Line** tool; the pointer changes to a hand with the Line icon.
2. Move the pointer to the point on the card where you want to place one end of the line.
3. **Press** and hold the left mouse button and drag in a horizontal or vertical direction. As you **drag**, a line is drawn, with one end fixed where you began to drag, and the other end following the pointer. Continue **dragging** until the line is the desired length.
4. Release the mouse button. The line appears on the card.

Adding a Rectangle:



To add a rectangle

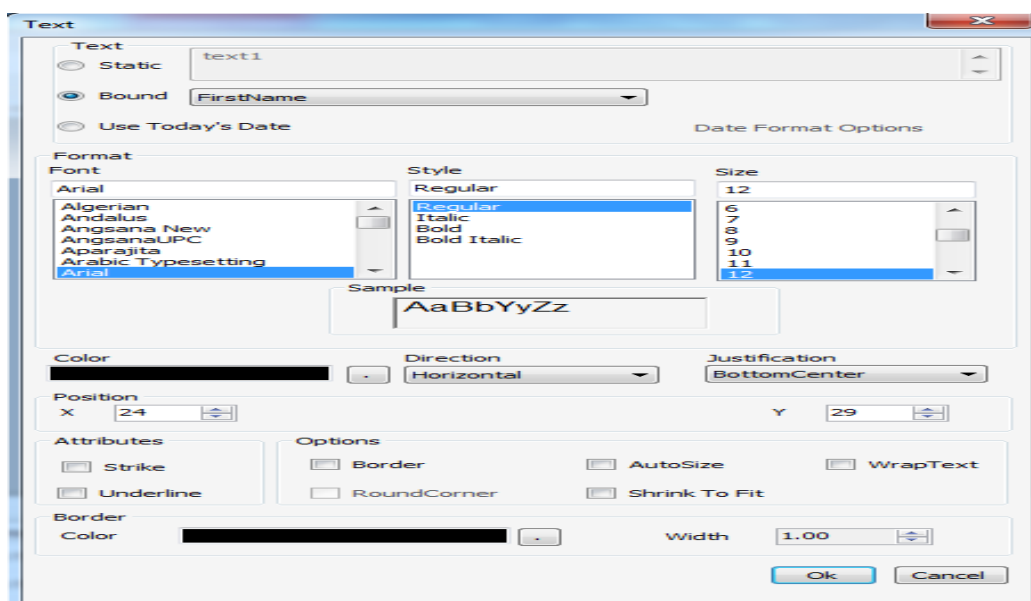
1. On the Drawing toolbar, **click** the **Rectangle** tool; the pointer changes to a hand with the Rectangle icon.
2. Move the pointer to the point on the card where you want to place the upper left corner of the rectangle.
3. Press and hold the left mouse button and **drag** in any direction. As you **drag**, a rectangle forms with one corner fixed where you began to **drag**, and the other corner following the pointer. Continue dragging until the
4. Release the mouse button. The rectangle appears on the card.

Adding Text:



To add text

1. On the Drawing toolbar, **click** the **Text** tool; the pointer changes to a hand with pen icon.
2. Move the pointer to the point on the card where you want to place a corner.
3. Press and hold the left mouse button and drag in any direction. As you **drag**, a rectangle forms with one corner fixed where you began to **drag**, and the other corner following the pointer. Continue dragging until the rectangle is the desired size.
4. Release the mouse button and double click the text rectangle, the Text Properties dialog box appears.



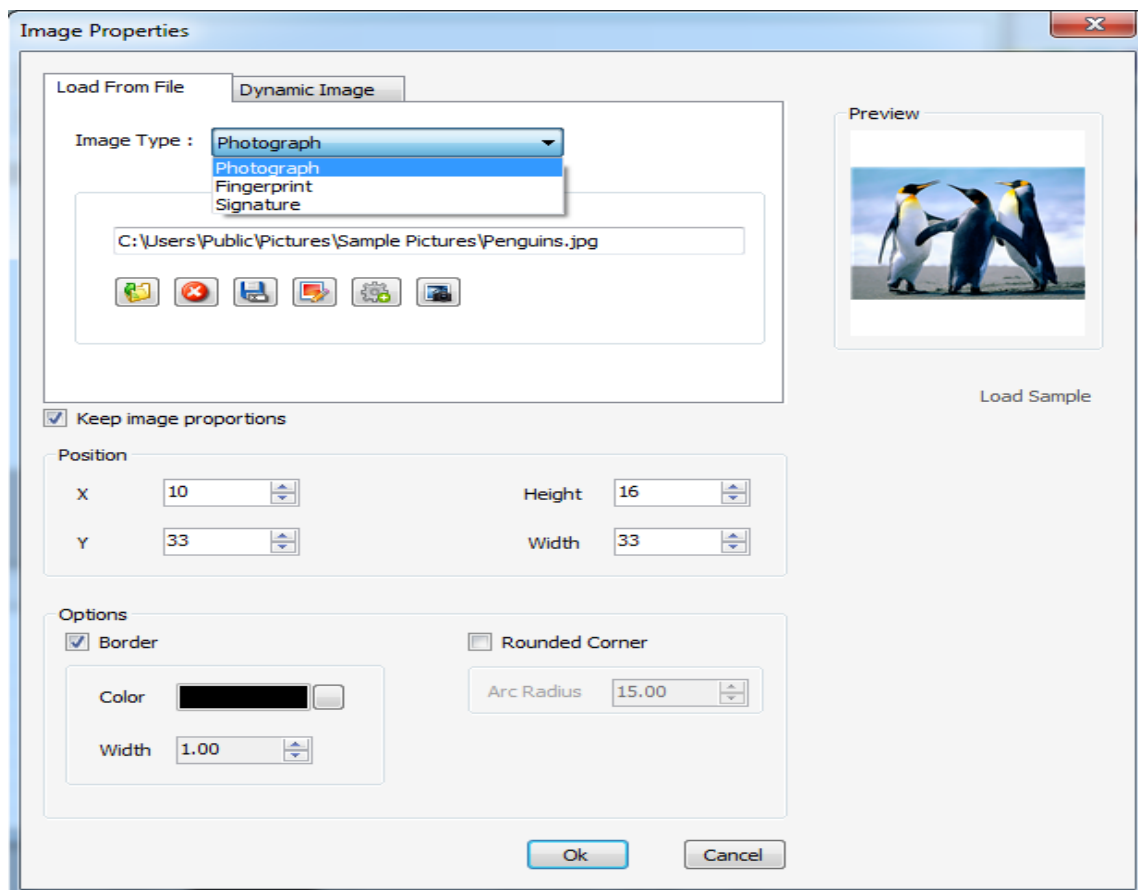
5. Type some text into the box, for example: "Text 1".
6. You can also bound text field to today's date or database field by clicking bound radio button and selecting appropriate field from the drop down list.
7. **Click OK** to complete the action.





Adding an Image:

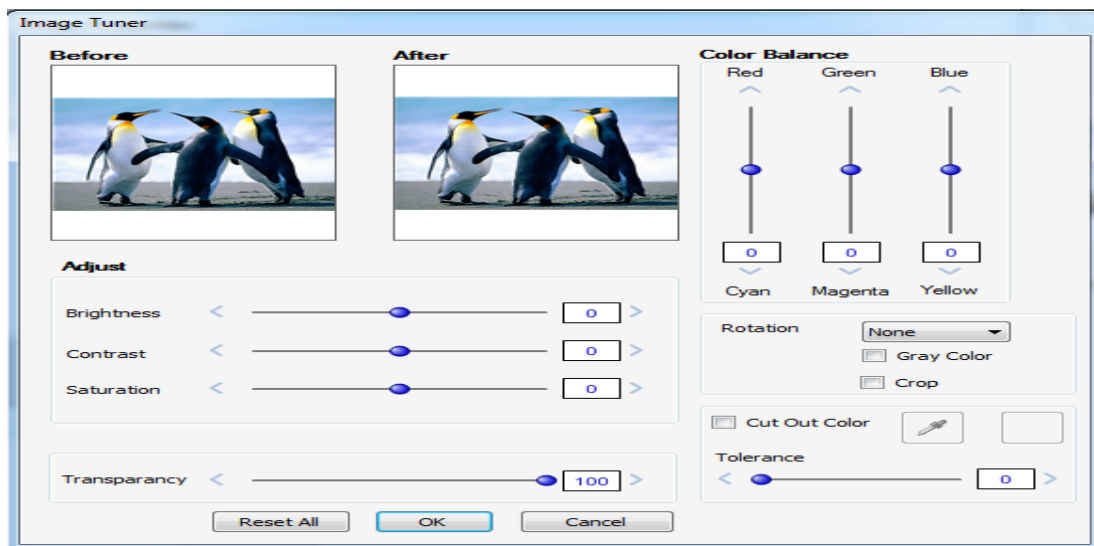


To add an Image to the card

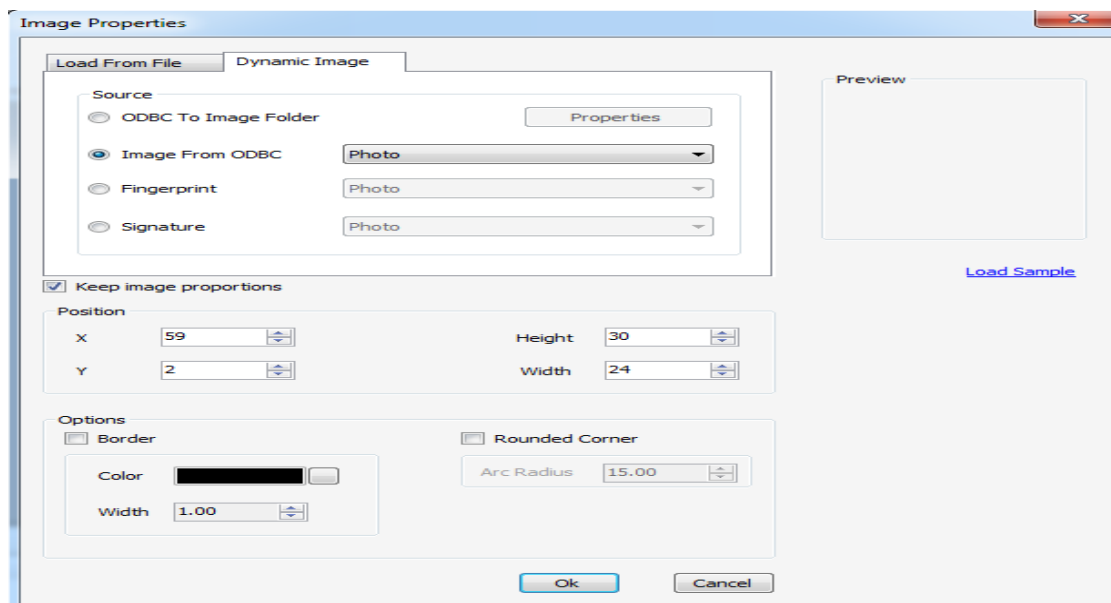
1. On the Drawing toolbar, **click the Image** tool; the pointer changes to a hand with the rectangle icon.
2. Move the pointer to the point on the card where you want to place the upper left corner of the image.
3. Press and hold the left mouse button and drag in any direction. As you **drag**, a rectangle forms with one corner fixed where you began to **drag**, and the other corner following the pointer. Continue dragging until the rectangle is the desired size.
4. Release the mouse button and double click the rectangle, Image Properties dialog box appears.




5. In **Load from File** tab, browse  a photograph, fingerprint or signature (or other artwork) to your card from an image file.
6. You can also add an image that is not in a file by using a camera, scanner or others. First select the desired **Source** from the list by clicking  and then click the **Capture**  button to capture the image.
7. By Clicking , you can enhance and edit the selected image properties. Using 'Cut Out Color' property you can remove the chosen color in the background

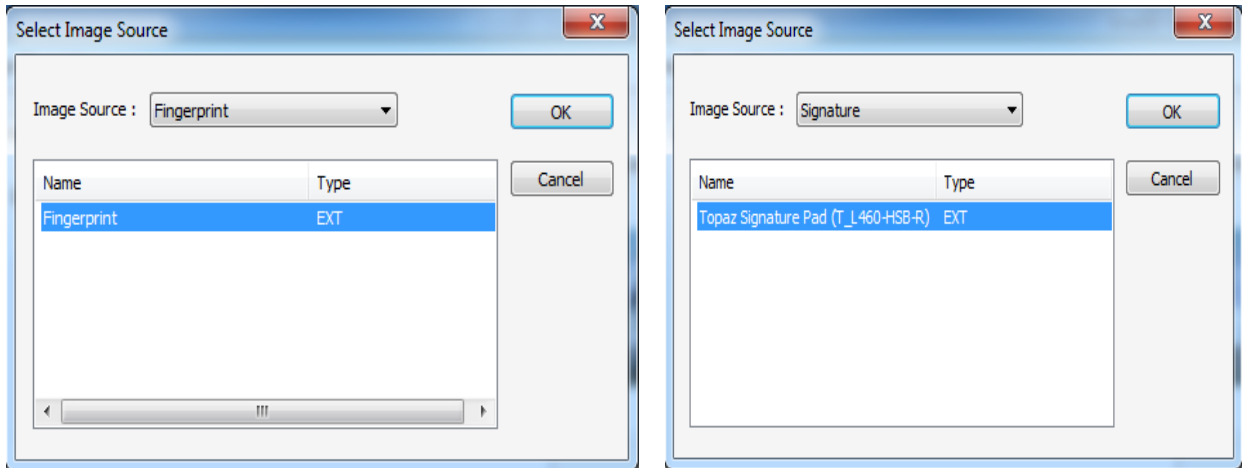


8. In **Dynamic Image** tab using ODBC, you can **Bound** an image object to database by selecting an appropriate field name from the drop down list.




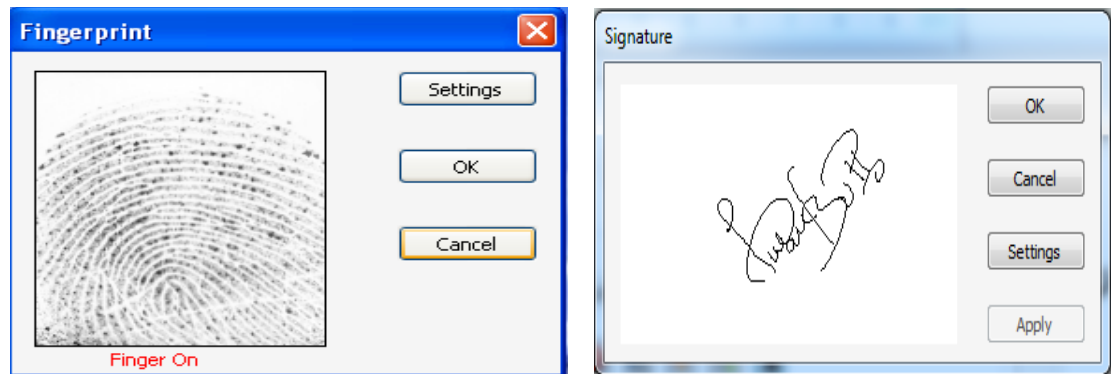
8. Also you can point database field to an **Image Folder** on your hard drive.
9. Finally **Click OK** to complete the action.

Note: Smart ID supports '**SecuGen Hamster IV**' for fingerprint and '**TOPAZ SigLite LCD 1x5 USB**' for signature capturing. To capture fingerprint or signature on to the card using those listed devices, you need to select the source by clicking  button



Then select either Fingerprint or Signature from the Image Source list and hit OK button.

Now by clicking  button, the capturing window will appear,



Place your finger on the SecuGen device

Sign on the Topaz SigLite device

Finally hit the OK button to save the captured image on the card

Adding a Bar Code:



To add a bar code to the card

1. On the Drawing toolbar, **click** the **Bar Code** tool; the pointer changes to a hand with the pen icon.
2. Move the pointer to a place on the card where you want to place a corner of the bar code.
3. Press and hold the left mouse button and **drag** in any direction. As you **drag**, a rectangle forms, with one corner fixed where you began to **drag**. The other corner follows the pointer. Continue dragging until the rectangle is the desired size.
4. Release the mouse button and double click the bar code rectangle, Bar code Properties dialog box appears.

Bar Code

Code

Static 038000356216

Bound IDNumber

Position

X 14 Height 13

Y 34 Width 36

Format

Format

Code 128

UPC-A

UPC-E

UPC 2 Digit Ext.

UPC 5 Digit Ext.

EAN-13

JAN-13

EAN-8

Interleaved 2 of 5

Direction

Horizontal

Foreground Color

Background Color

Generate label

Label

Size

10

4

5

6

7

8

9

10

Label Location

BottomCenter

Label Color

Ok Cancel

5. Select a bar code **Format** from the list. You can choose from among the 24 styles.
6. Type the data you want to appear in the bar code.
7. **Click OK.** The bar code will appear on the card.

Bar Code Standards

The number of elements and their order is defined by the bar code standard used. There are many bar code standards to choose from and each standard was developed for the specific data requirements of various industries. Each standard dictates the maximum number of characters a symbol can represent, as well as what kind of data is represented.

Consequently, the number of characters in the information field and the type of information represented will play a role in which bar code standard can be used. Other considerations include what standard(s) trading partners use, the scanning environment (type of scanner, printable area, symbol durability, etc.) and the symbol printing requirements.

Symbologies

Symbology is the term used to describe the rules specifying the way data is encoded into the elements (bar and space widths) that comprise a bar code standard.

Smart ID Software Symbologies

The symbologies listed below can be printed with the Card Software.

Summary of Supported Bar Codes

Bar Code Type	Input Length	Encodes	Elements per Character	Characters per Inch
Codabar	2 to 50	D	11	9
Code 128	2 to 50	U-L-D-C	11	9
Code 128 A	2 to 50	U-D-C	11	9
Code 128 B	2 to 50	U-L-D	11	9
Code 128 C	2 to 50	D	5.5	18
Code 39 (3 of 9)	2 to 50	U-D	15	6.7
Code 93	2 to 50	U-D	9	11
EAN/JAN-13	12, 14 or 17	D	7	14
EAN/JAN-8	7, 9 or 12	D	7	14
Extended 39	2 to 50	U-L-D-C	30	3.3
Extended 93	2 to 50	U-L-D-C	18	5.6
HIBC (3 of 9)	2 to 50	U-D	15	6.7
Interleaved 2 of 5	2 to 50	D	9	11
MSI Plessey	2 to 50	D	12	8.3
UCC/EAN-128	19	D	5.5	18
UPC-A	11, 13 or 16	D	7	14
UPC-E (11 digit)	11, 13 or 16	D	4	25
UPC-E0 (6 digit)	6, 8 or 11	D	4	25
UPC-E1 (6 digit)	6, 8 or 11	D	4	25
Zip+4 POSTNET	5, 9 or 11	D	5	4.2

U- Upper Case, L - Lower Case, D - Digits, C - Control Characters

Adding 2D Bar Codes:



To add 2D bar code to the card

1. On the Drawing toolbar, **click** the **2D Bar Code** tool; the pointer changes to a hand with the pen icon.
2. Move the pointer to a place on the card where you want to place a corner of the bar code.
3. Press and hold the left mouse button and **drag** in any direction. As you **drag**, a rectangle forms, with one corner fixed where you began to **drag**. The other corner follows the pointer. Continue dragging until the rectangle is the desired size.
4. Release the mouse button and double click the bar code rectangle, Bar code Properties dialog box appears.

2D Barcode

Barcode

Style: PDF417 (dropdown menu showing QRCode, PDF417, Datamatrix)

Code: Static: 038000356216 Bound: [dropdown]

Position: X: 10, Y: 23, Height: 16, Width: 23

Parameters

Encoding: Binary (dropdown)

Aspect Ratio: 0.5 (0-9)

X to Y Ratio: 3

Number Of Rows: [dropdown]

Number Of Columns: [dropdown]

ECC Level: 0 (dropdown)

Foreground Color: [black color picker]

Background Color: [white color picker]

Ok Cancel

Note: There are three different types of 2D Bar Codes available in Smart ID i.e. QR Code, PDF417 and DataMatrix

5. Select a bar code type from the list
6. Type or bound the data you want to appear in the bar code. Set the appropriate parameters associated with each bar code type
7. **Click OK.** The bar code will appear on the card.

Working with Objects

This part explains how to work with objects.

Aligning Objects:

Use the **Align** Tool in Object Menu to align multiple selections of objects on the card. The selected objects will be aligned with the dominant object.

The available alignments are:

Align Left - Aligns the selection to the left.

Align Horizontally Center - Centers the selection horizontally.

Align Right - Aligns the selection to the right.

Align Top - Aligns the selection to the Top.

Align Vertically Center - Centers the selection vertically.

Align Bottom - Aligns the selection to the bottom

Sizing Objects:

Use the **Size** Tool in **Object** menu to resize multiple selections of objects on the card.

To Tallest – Resize the selected objects to the tallest

To Shortest – Resize the selection to the shortest

To Widest – Resize the selection to the widest

To Narrowest – Resize the selection to the narrowest

Moving Objects:

You can draw objects in any order and then move them up and down as needed.

1. Select the objects you want to move up or down in the stack.
2. Either use the toolbar on the main window or In **Object** menu, select **Move** and then click **Bring to Front** or the **Send to Back** option.
3. The selected object will be placed at the front or the back of the stack.

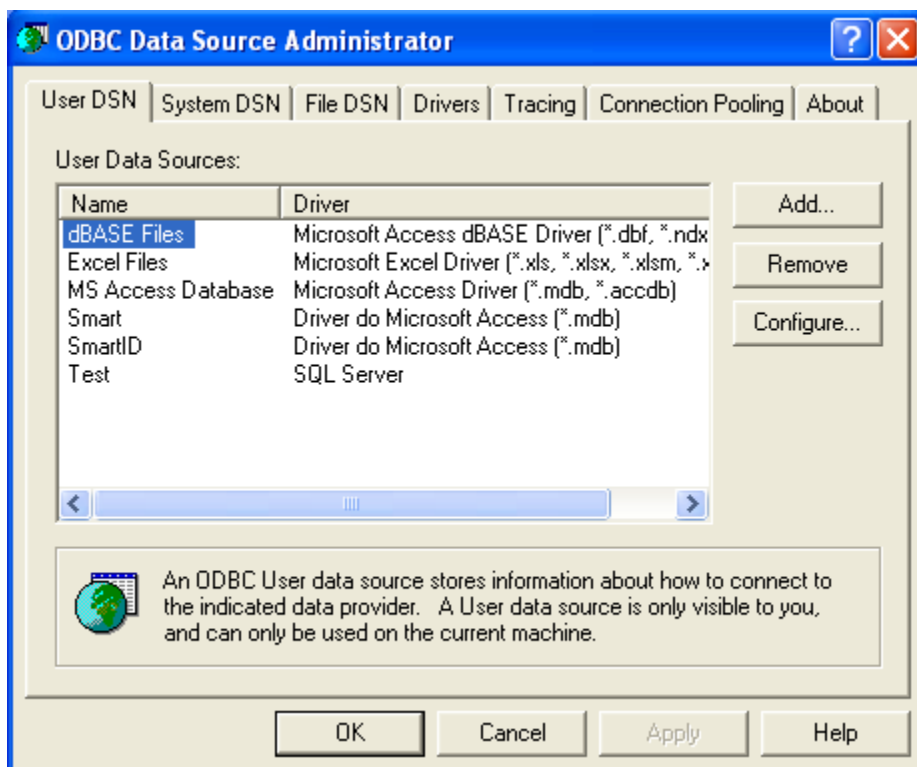
Configuring Database

The Smart ID Software accesses databases through ODBC drivers.

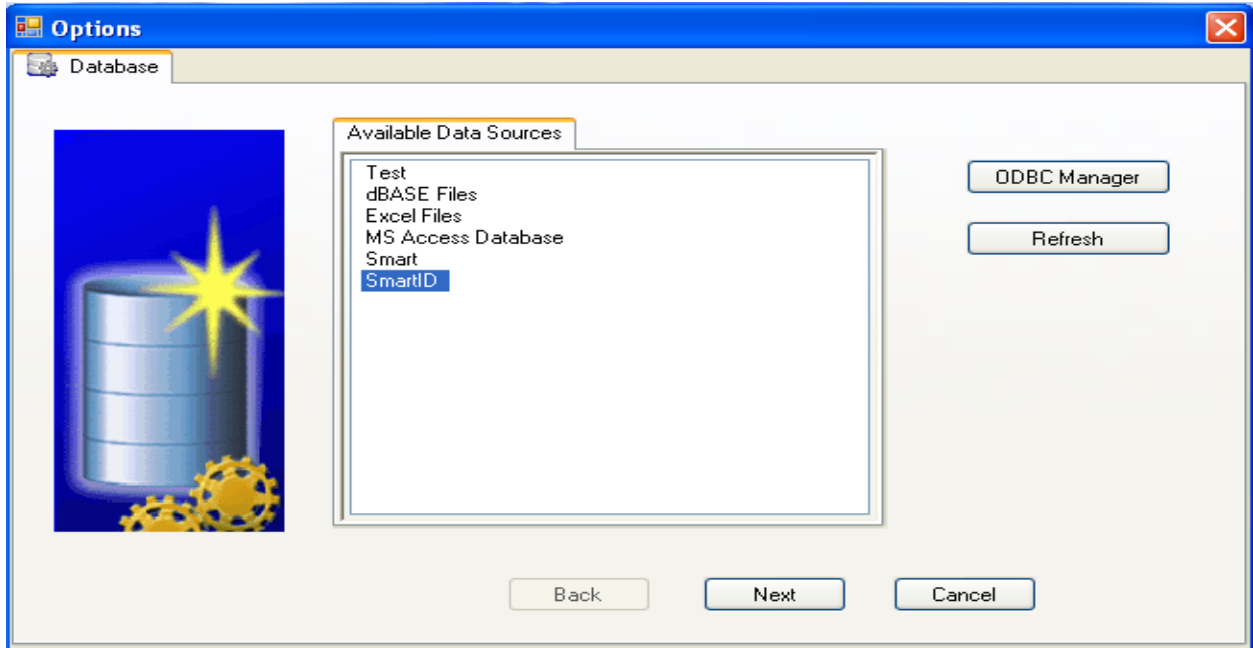
ODBC was created as a way of setting a standard to access data on files. Using concepts like layers and layer abstraction, it allows the user to access data on his hard disk, in a local network or even in a Wide Area Network, using desktop or server/client specifications, in any database format that have available ODBC driver.

External Data Sources can be configured by the user running the ODBC administrator to gain access to the files.

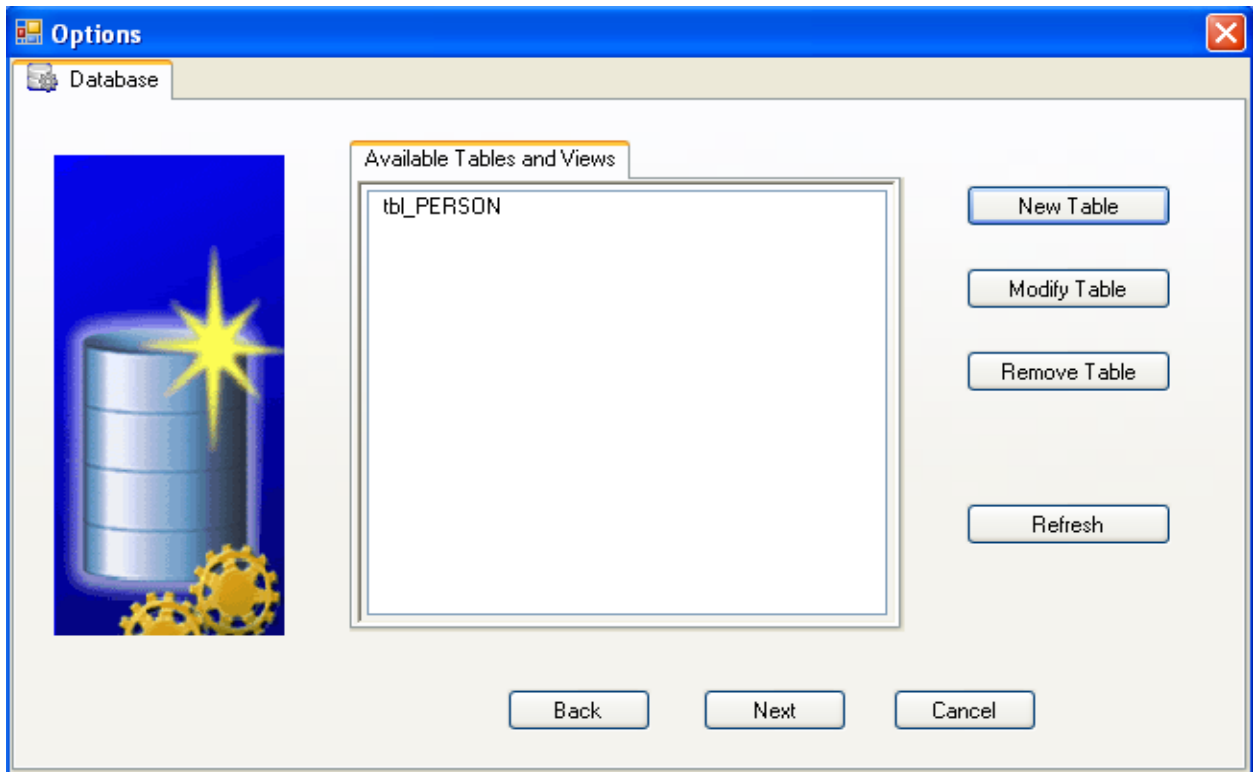
To run ODBC manager, go to **View** menu, click **Connections** and then **ODBC Manager**. Now add and configure the User **DSN** that points to the data source.



After configuring data source successfully, select one of the sources from the window below and click **Next**.



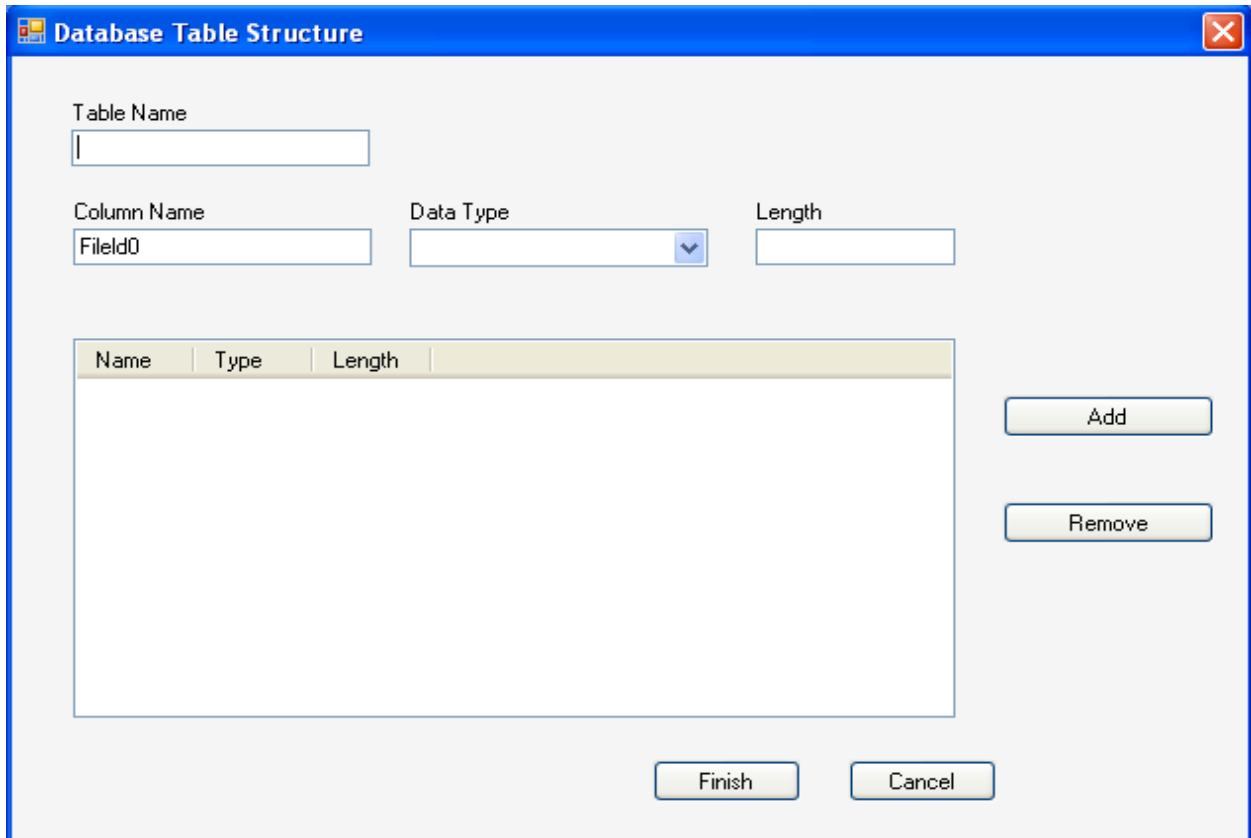
The Table view window below appears, showing tables in a database



Working with Tables

Add a new Table:

After connecting successfully to the database. In Table view window, click **New Table** button, the dialog box below appears



The dialog box titled "Database Table Structure" contains the following elements:

- Table Name:** A text input field.
- Column Name:** A text input field containing "Field0".
- Data Type:** A dropdown menu.
- Length:** A text input field.
- Table Structure:** A table with the following header:

Name	Type	Length
------	------	--------
- Buttons:** "Add", "Remove", "Finish", and "Cancel".

Here you can add a new table to an existing database.

Enter Table Name, Column or Field Name and Data Type and hit the **Add** button. You can also remove the added table by clicking **Remove** button.

Finally click the **Finish** button

Modify an existing Table:

In Table view window if you want to modify an existing table just select that table and click **Modify Table** button.

The following window will be displayed.

Database Table Structure

Table Name
tbl_PERSON

Column Name Data Type Length
Field31 [v] []

Name	Type	Length
Person_ID	NVARCHAR	
First_Name	NVARCHAR	
Last_Name	NVARCHAR	
Employee_Number	NVARCHAR	
Title	NVARCHAR	
Department	NVARCHAR	
Address	NVARCHAR	
City	NVARCHAR	
State	NVARCHAR	
Province	NVARCHAR	
Zip_Code	NVARCHAR	
Country	NVARCHAR	
Company	NVARCHAR	

Add

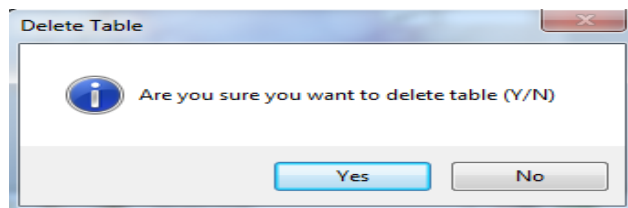
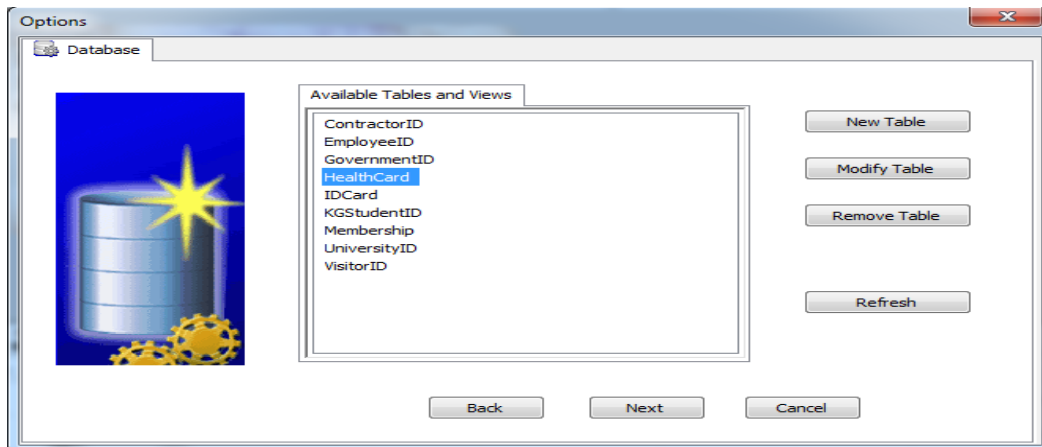
Remove

Finish Cancel

Here you can Add, Modify and Remove the data fields.

Remove a Table:

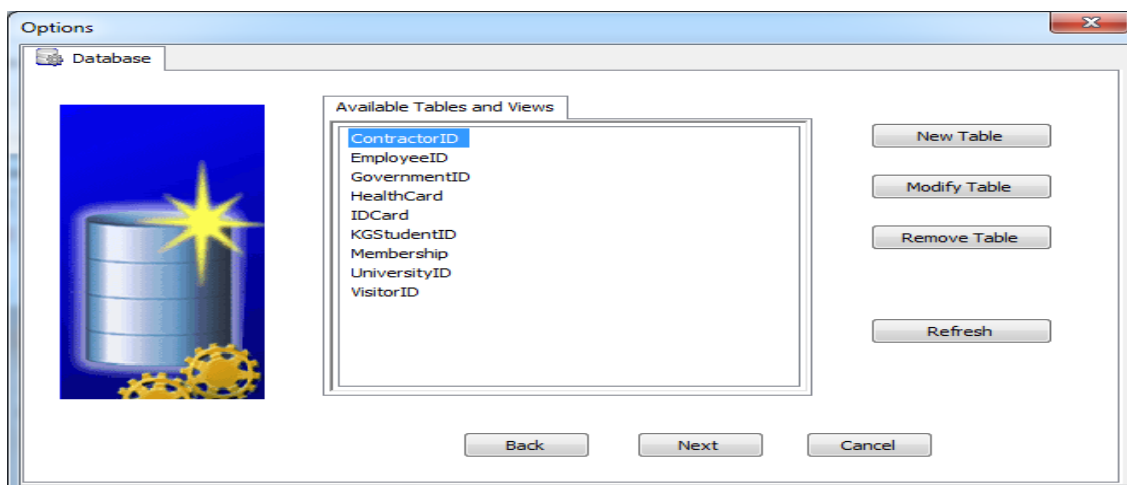
Select the table from the list that you want to be removed and click the Remove Button



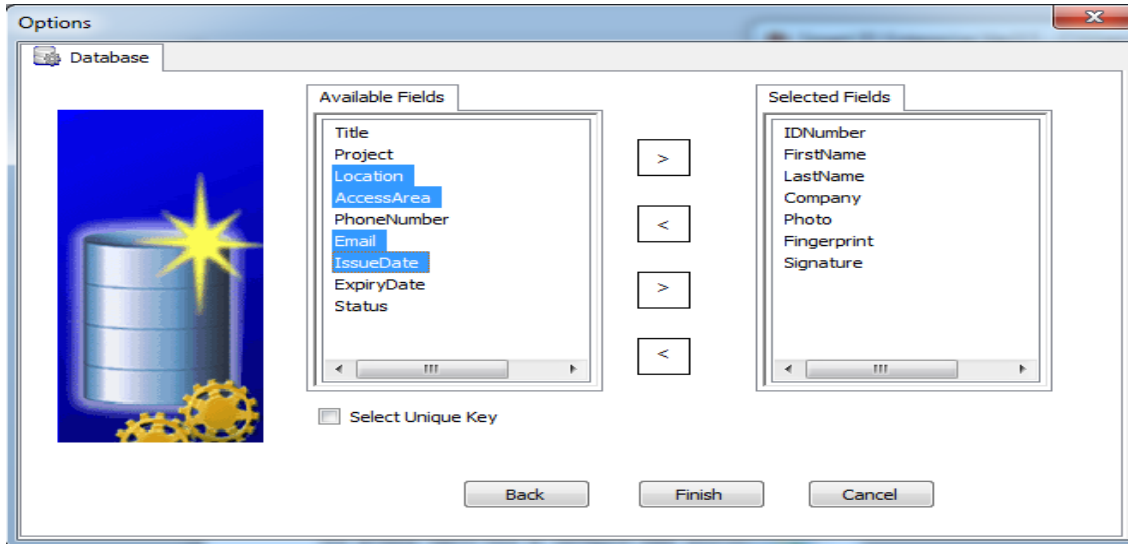
We already learnt how to configure data source and work with tables in a database. Now the next step is to display the contents of a database in our main application so that we can attach cardholder records to the card template for printing purposes.

To do that, just follow the instruction below

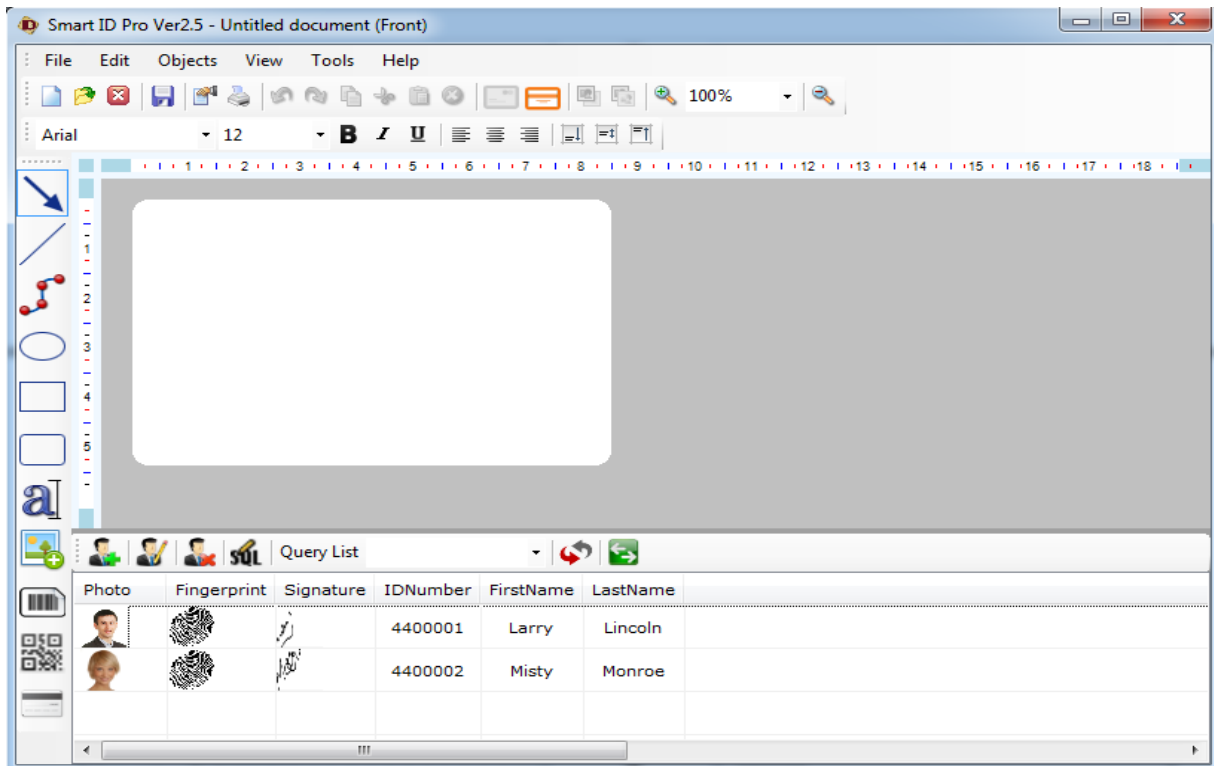
Select the table from the list and click next



Now select the fields that you want to attach to the cardholder details from 'Available Fields' column and then click **arrow >** to move them to the next 'Selected Fields' Column.



On hitting finish button, the following screen will be displayed,

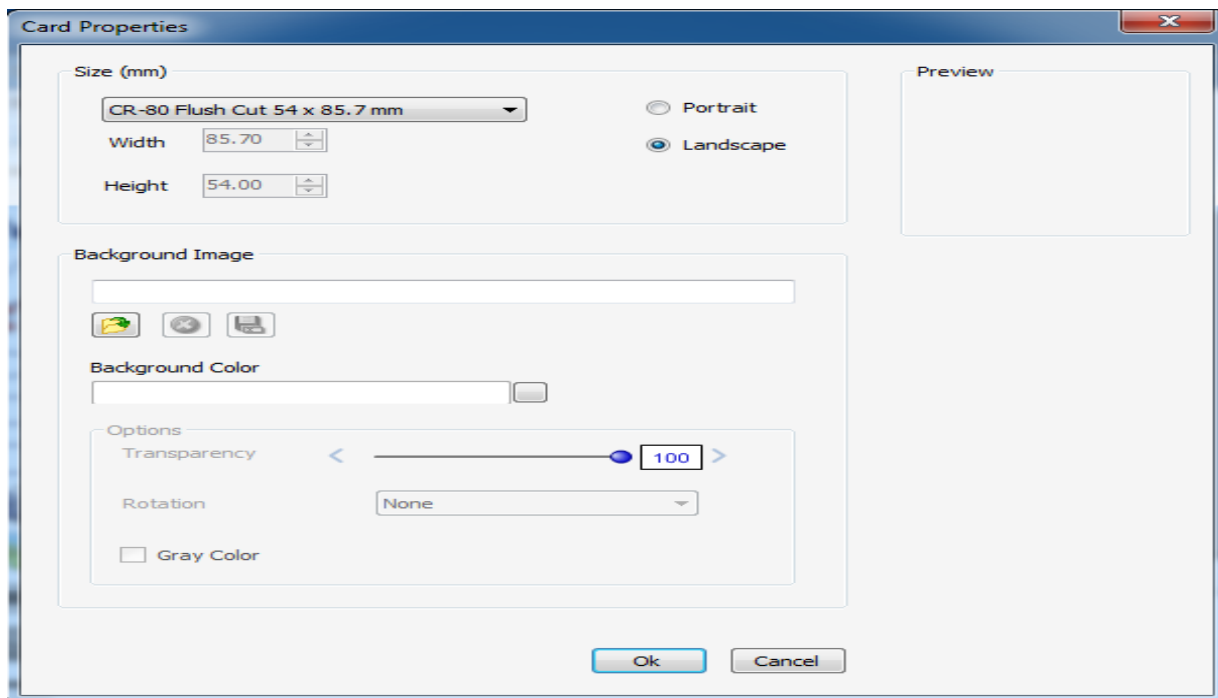


Card Template Design

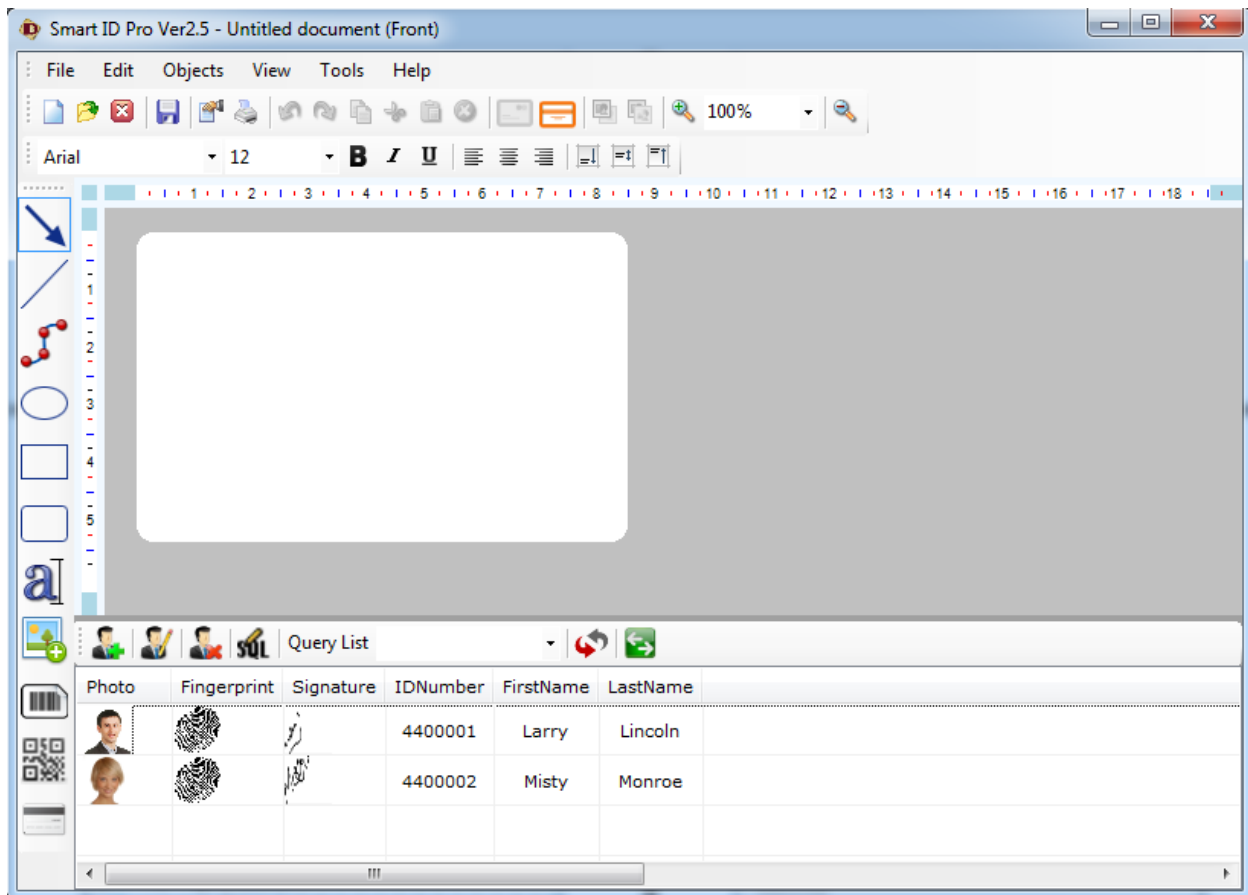
The Card Design Mode is where you create templates for cards, either from scratch or by modifying existing templates. It is here that you decide what your cards will look like, what types of text and data they will hold and display, and what types of special features (such as barcodes, magnetic stripes or chips) they will incorporate. This is all done through a simple drag-and-drop visual interface, while Smart ID takes care of creating a custom database for you 'behind the scenes'. The best part is that no database programming knowledge or skills is needed. To fully appreciate the powerful features of the Card Design Mode, take a look at the simple steps involved with creating a new card template.


To create a new card template, press the 'New' button on the upper left of the main window.

After pressing the 'New' button, a 'Card Properties Options' window will appear asking you to specify Card Properties.



After you select the basic properties, a new blank template appears within the workspace.



Note: If you are still in **Data Mode**, Click on the  **Design Mode/Data Mode** button right above the list of records and start designing the templates based on your requirements.


If you want to attach cardholder records to the card template then always bound the **Text** and **Image** objects on the card template with the database record fields.

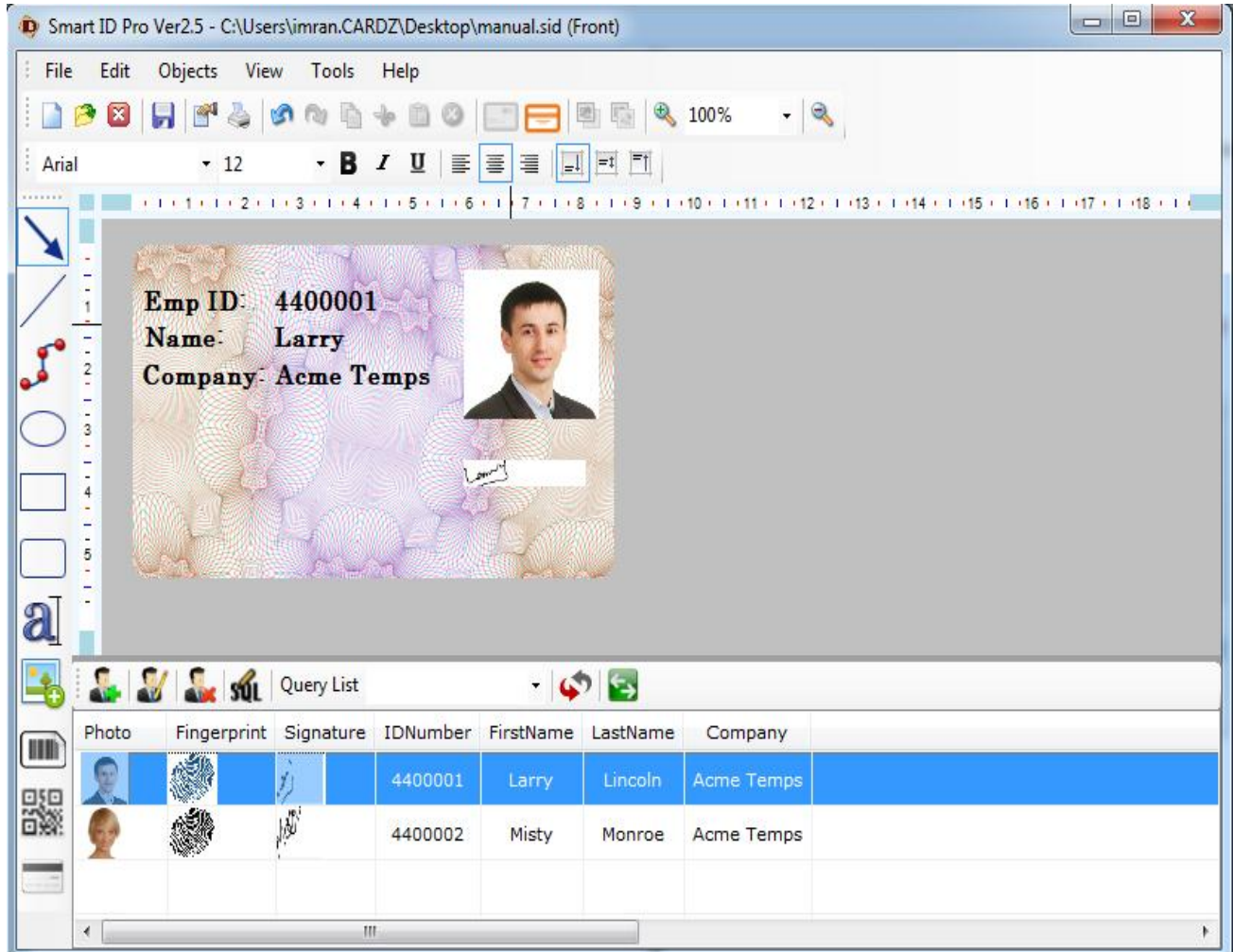
Now start designing a card according to your requirements.

A new card template with Text and Photo fields bounded to a database will look like this window below.







The screenshot shows the Smart ID Pro Ver2.5 software interface. The main window displays a card template with the following text fields: **Emp ID: [IDNumber]**, **Name: [FirstName]**, and **Company: [Company]**. A photo field is also present, showing a silhouette of a person. The interface includes a menu bar (File, Edit, Objects, View, Tools, Help), a toolbar with various icons, and a status bar. A query list is visible at the bottom, showing data for two employees.

Photo	Fingerprint	Signature	IDNumber	FirstName	LastName	Company
			4400001	Larry	Lincoln	Acme Temps
			4400002	Misty	Monroe	Acme Temps

Now on main window if you switch to Data mode  and select a record from the list then that selected record in the database will appear on the card template. Have a look at the screen below.



The screenshot shows the Smart ID Pro Ver2.5 software interface. The main window displays a card template with the following text: Emp ID: 4400001, Name: Larry, and Company: Acme Temps. A photo of a man is visible on the right side of the card. Below the card template is a 'Query List' table with the following data:

Photo	Fingerprint	Signature	IDNumber	FirstName	LastName	Company
			4400001	Larry	Lincoln	Acme Temps
			4400002	Misty	Monroe	Acme Temps

Cardholder Records



Data Mode is the part of Smart ID that you will use most often. This is where the individual cardholder's photograph, signature, biometric and personal data can be captured and added to the card template's database. The Data mode is very simple to use.


Let's take a look at how the Data Mode functions by opening the card template we created in the last section, and then adding records to the database.

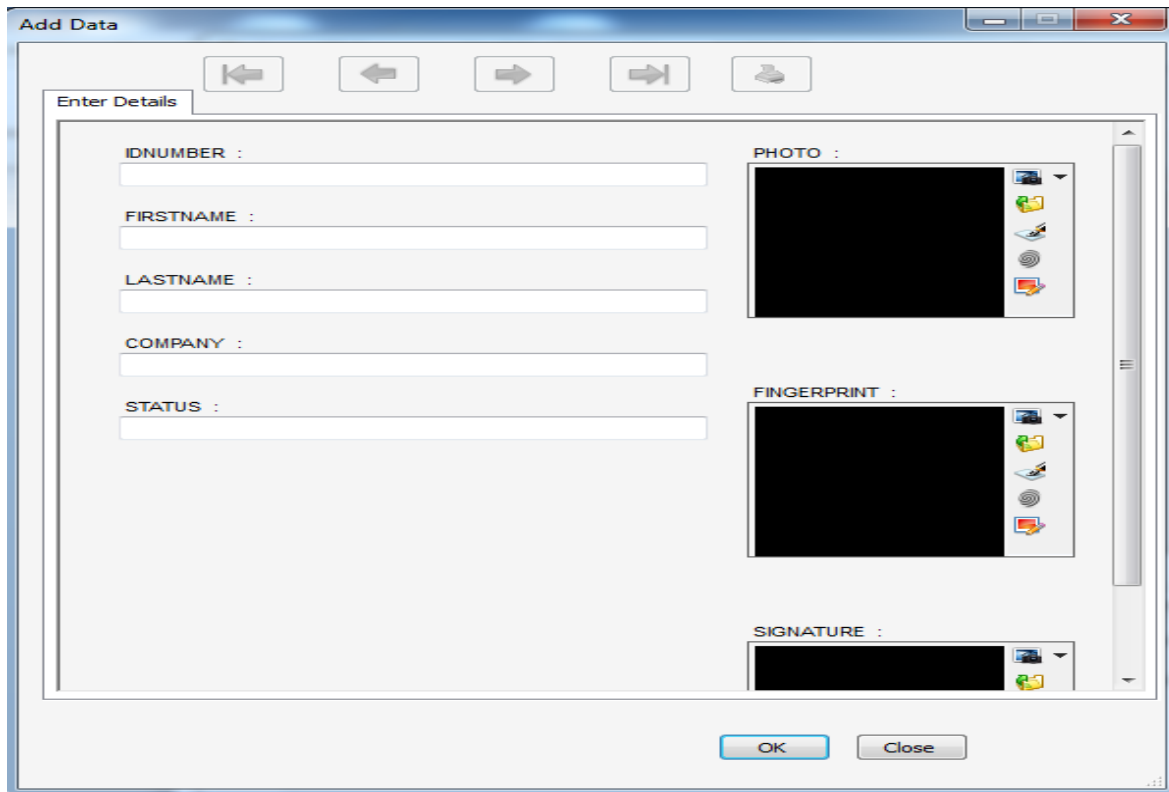


Adding a Record:

Enter user details in the text boxes.

To capture image in photo box, first you need to click select the source by clicking downwards arrow on  button and select device from the list. A device could be a camera or scanner that supports Twain or Direct Show. For capturing hit the  button again.


You can also browse image from your hard drive by clicking  button.

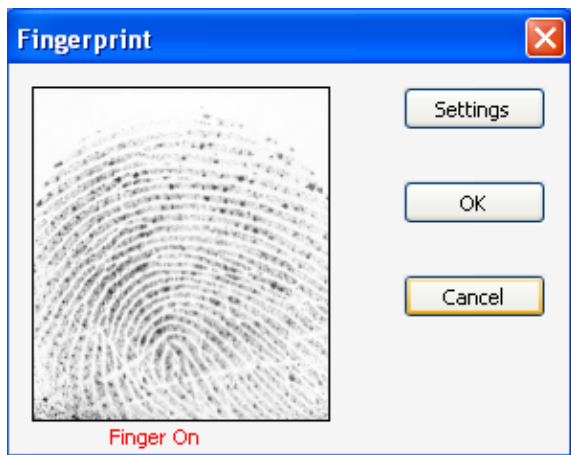



The screenshot shows a Windows-style dialog box titled "Add Data". At the top, there are navigation buttons: a left arrow, a double left arrow, a right arrow, a double right arrow, and a floppy disk icon. Below these is a tab labeled "Enter Details". The main area contains several input fields and image capture options:

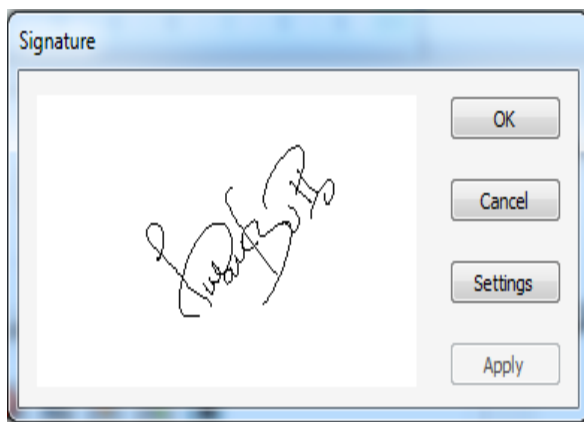
- IDNUMBER :** A text input field.
- FIRSTNAME :** A text input field.
- LASTNAME :** A text input field.
- COMPANY :** A text input field.
- STATUS :** A text input field.
- PHOTO :** A large black rectangular area for the photo. To its right is a dropdown menu with a camera icon and a folder icon, and a vertical toolbar with icons for camera, folder, and a circular biometric sensor.
- FINGERPRINT :** A large black rectangular area for the fingerprint. To its right is a dropdown menu with a camera icon and a folder icon, and a vertical toolbar with icons for camera, folder, and a circular biometric sensor.
- SIGNATURE :** A large black rectangular area for the signature. To its right is a dropdown menu with a camera icon and a folder icon, and a vertical toolbar with icons for camera and folder.

At the bottom of the dialog box are two buttons: "OK" and "Close".

Smart ID supports 'SecuGen Hamster IV' for fingerprint capturing. To capture fingerprint using SecuGen device, you just need to click , place your finger on the SecuGen scanner and get the fingerprint captured automatically.



Smart ID also supports 'Topaz SigLite LCD 1x5 USB' for signature capturing. To capture signature using Topaz device, you just need to click , sign your signature on the Topaz signature pad and get the fingerprint captured automatically.



Finally hit the OK button to save all the information into the database.



Editing a Record:

Double click the record or select it and click the edit icon placed just above the records list. Now you can edit any of the required text or image fields.

Edit Data

Enter Details


IDNUMBER :
4400001


FIRSTNAME :
Larry


LASTNAME :
Lincoln

COMPANY :
Acme Temps


STATUS :
True

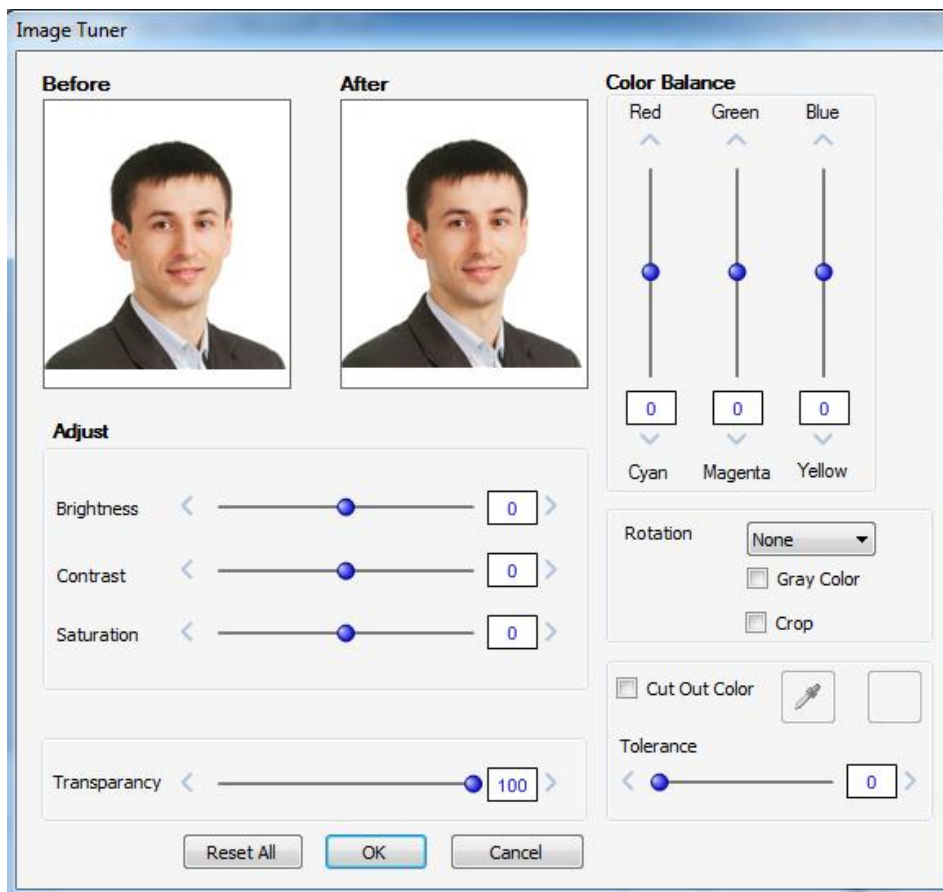
PHOTO :


FINGERPRINT :


SIGNATURE :



OK Close

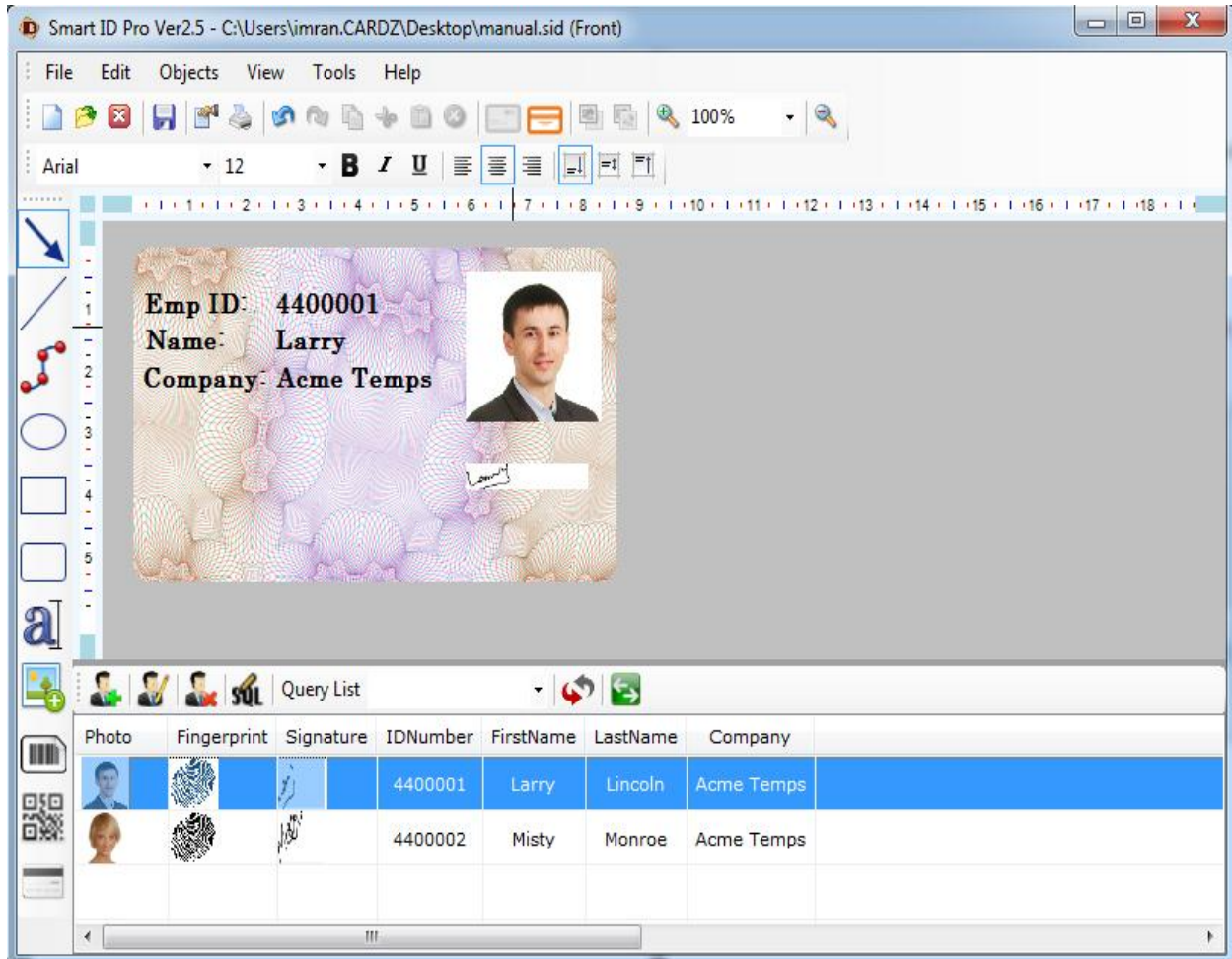
Existing image can be edited by clicking  button. In editing window you can adjust the image properties



Note: Image cropping can be done by marking the 'Crop' checkbox. Also you can remove selected background color from an image by marking the 'Cut Out Color' checkbox property.

Deleting a Record:







Select the record from the list and click the delete button  located just above the record list.



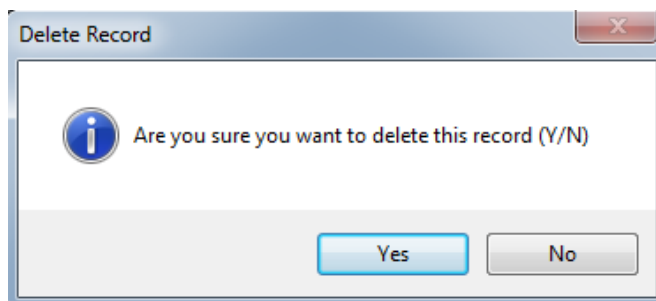
The screenshot shows the Smart ID Pro Ver2.5 application window. The main area displays a sample ID card with the following details:

- Emp ID: 4400001
- Name: Larry
- Company: Acme Temps

Below the ID card is a 'Query List' table with the following data:

Photo	Fingerprint	Signature	IDNumber	FirstName	LastName	Company
			4400001	Larry	Lincoln	Acme Temps
			4400002	Misty	Monroe	Acme Temps

The system will ask you for delete action confirmation.



Query Editor

The query editor allows the user to Select and Find records on the Database.

When you select **Query Editor** from the **Tools** menu. A dialogue box will be displayed as shown below.

Query Editor

Query List

Query

Define Query

IDNumber = 44000001 AND

Photo Not Null

Sort By

Ascending

Descending

Card Status

Printed

Not Printed

Run

Save

Clear

Close

Select a Database Field from drop down list box, select operator, next to it enter the value in your query and press "Run" button to get a smaller list of records.

Note: You can also save the query by hitting the "Save" button. When required you can run the saved query to get the desired list of records.

Data Encoding (Mag. Stripe Cards)

If your printer is equipped with a magnetic stripe encoder, you can encode data onto cards that have an embedded magnetic stripe.

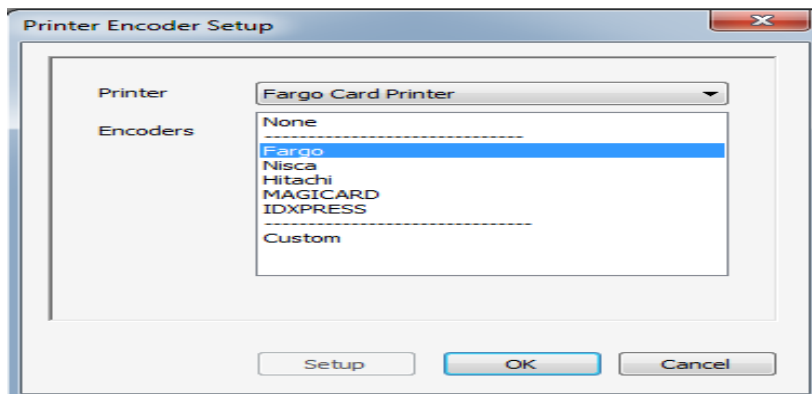
There are two kinds of magnetic stripe cards: low coercivity and high coercivity. There are three magnetic tracks on a magnetic stripe card. To comply with international standards, each track is limited to a certain number and type of character.

The following table lists the number and type of characters allowed on each of the three tracks.

Track	Character Limit	Allowed Characters
1	79 alphanumeric	ASCII codes 32-95 Field Separator is ^
2	40 numeric ASCII	ASCII codes 48-63 Field Separator is =
3	107 numeric ASCII	Separator is ^

Selecting Encoder:

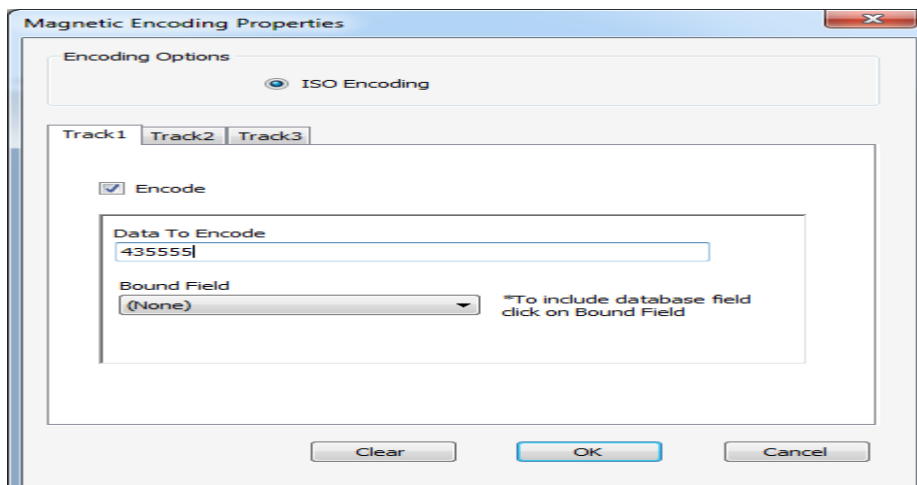
To associate the encoder type with the printer, select **Printer Encoder Setup** from the **Tools** menu.



Select the desired printer from the drop down menu and then assign encoder from the list below. Finally hit the OK button to save the printer and encoder association.

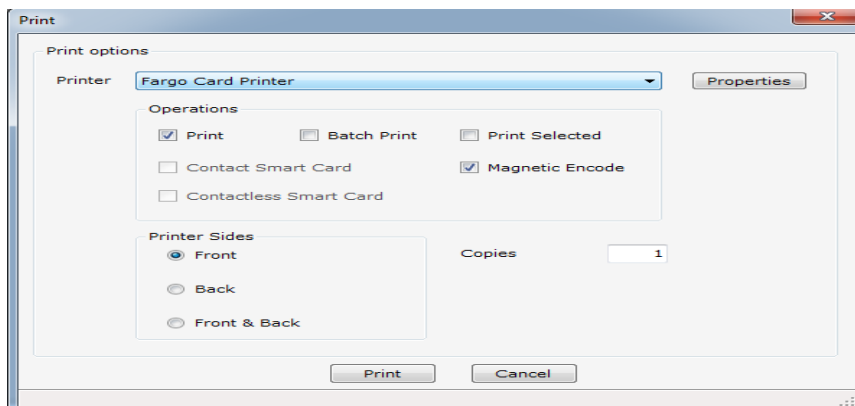
Data to Encode:

In the **Tool** menu, select **Magnetic Encoding**.



Enter data in Track1, Track2 and Track3. You can also bind the Track data to the connected database. Click OK button to save the data.

Finally to transfer encoded data on to the Mag Stripe cards, select Print from the File menu.



Then select **Magnetic Encode** from the Print dialog box and hit the print button. This will encode data on to the magnetic stripe card using your printer encoder.

Net Licence:

How to use the Net Licence; please follow the following steps below

1. Install Master software from the CD and plug in the Master USB dongle in to the computer.
2. Run the Smart ID software, connect the database using DSN, design the card and save the design template on to your hard drive.
3. Now install the Client version of Smart ID software from the CD in your Client PC and put Net USB licence dongle in to the Client PC.
4. Make a DSN in Client PC and point it to the central database. Please make sure you use exactly the same name for DSN as the one you've used it in Master PC for creating DSN.
5. Now copy the saved template from Master PC to the Client PC and double click the template to run.

Note: You can only print in Client PC using the Net licence