

# Informatik ScanApp (Barcode Recognition)

Version 4.11

## User Notes

15 August 2014

This program scans and recognizes barcodes and text and names the files accordingly. The program can also process existing multi-page TIFF files.

Always make sure that all affected files are properly backed up. Files may be overwritten, appended to or corrupted.

This program requires **Microsoft Framework 4.0** or later. If you do not already have the Framework file, it can be freely downloaded from the Microsoft website.

A free utility to create barcode sheets can be downloaded from the Informatik web page (Informatik ScanApp download page) or from [www.informatik.com/SetupBarcodeMaker.msi](http://www.informatik.com/SetupBarcodeMaker.msi).

The trial version appends a DEMO page at random. Trial versions are for testing and must not be used after 30 days.

This software is supplied AS IS without any warranties, guarantees, or liabilities.

## If not working....

If the scanner does not respond, do one of the following:

- Turn off the scanner, then turn it on again.
- Check and make sure that you have the current Twain driver for the scanner. Twain drivers can be downloaded from the scanner manufacturers' web pages.
- If all fails, consider using the built-in Windows scanning software (called 'Windows Fax and Scan') that is included with Windows 7 and 8. Scan the documents to a temporary file, then open that file in Informatik ScanApp via the File menu.
- Check and make sure that you have Microsoft Framework 4.0 installed.
- As last resort, uninstall and re-install Informatik ScanApp program.

## How to Use....

### Barcode or OCR Location

OCR means Optical Character Recognition.

- Specify the zone of interest, the location of the barcode or text. For barcodes, click on Barcode Measurements option in the File menu. The Barcode Measurement window appears. Open a sample of an image with the barcode, with your left mouse button pressed, outline the area of the barcode. Do not add extra offsets as the system will build in tolerance. When you release the mouse button, the type of barcode and the measurements (left, top, width, height) are shown. Go back to the Scan window and enter the four measurements. For OCR text, use any manual system to determine the location. Also, please read the OCR section below.
- Specify the Barcode Type or OCR. Click on the down-arrow of the 'Barcode Type or OCR' dropdown list and make a selection. Many different barcodes are supported. For the OCR language, see section below.
- Specify the Read Direction from the dropdown list (for barcodes only).
- Optionally, specify the Text Pattern. See Text Pattern section below.

### Save File Specification

Files can be saved either as TIFF or PDF files.

- Specify the output folder. Click on the Browse button (...) and select the folder.
- Specify the output file name template. As a minimum you must enter \*.tif or \*.pdf. The asterisk will be replaced by the text of the barcode. For example, if the barcode has a value of 12345, the \*.tif specification will be converted to 12345.tif. You can also add a prefix or a suffix. For example, a INV\*.pdf file specification will be converted to INV12345.pdf. The file name can also include a subfolder, for example myFolder\12345.
- If you save the files as TIFF, specify the TIFF compression. Monochrome images can be saved as CCITT4 (Group 4) or CCITT3 (Group 3). CCITT4 is recommended and is the default. CCITT4 and CCITT3 do not support

color. LZW compression allows either monochrome or color. All color images will be saved as LZW regardless of the specified compression.

- If you process existing TIFF files (without scanning), then the output file must be a TIFF file; the extension must be '.tif'.

### **Scan Specification**

- Specify the Scan Area. If not specified, a scan area of letter size will be used (8.5 Inches x 11 Inches).
- Specify the Resolution. It is recommended that a minimum resolution of 300 ppi should be used so that the barcodes can be read correctly. If the barcodes are very large, then a lower resolution may be acceptable.
- Specify Brightness and Contrast. Enter a value between -100 and 100. The default is 0.
- Specify the Color Depth. The choices are Monochrome, Grayscale (8bit) and Color (24-bit). The default is Monochrome.
- Select other Options:
  - Duplex (if your scanner is Duplex enabled)
  - Exclude Blank Pages. Auto-Rotate: 90, 180 or 270 degrees  
Rotation can be done before or after reading of the barcode.  
Auto-Rotate is useful if you scan the sheets upside down to prevent jamming due to damaged paper (staple marks, doggy-eared, etc).
  - Exclude Barcode (also OCR) Page
  - Barcode must be on all pages. A prompt is given if barcode is missing.
  - Deskew
  - Despeckle

### **Templates**

Once you have specified the settings, they can be saved as templates. Choose 'Create Template' from the File menu. Give the template a meaningful name.

To open a template file, choose 'Open Template' from the File menu.

When you open a template, all entry fields, except the folder and file name fields are disabled. Disabling is done so that settings are not accidentally changed. To change a setting, go to File menu and choose Cancel Template.

The program can be launched with a command line with syntax like:

C:\DirXYZ\scanbarcode.exe C:\DirXYZ\TemplateXYZ.xml

## **Barcodes**

The following barcode types are supported:

Code39  
Code128  
Code11  
Code93  
Code I25  
Code S25  
Codabar  
CodeEAN  
CodeEANPlus  
CodeUPCE  
CodeTelepen  
CodePostnet  
CodeRm4scc (Royal Mail)  
OCR (Optical Character Recognition)

A free utility to create barcode sheets can be downloaded from the Informatik web page (Informatik ScanApp download page) or from [www.informatik.com/SetupBarcodeMaker.msi](http://www.informatik.com/SetupBarcodeMaker.msi).

## **OCR Optical Character Recognition**

The program includes basic OCR. Choose OCR from the 'Barcode Type and OCR' drop-down list. Please consider the following when using the OCR option:

Specify the location of the OCR precisely. Only the text that you wish to read must be in the zone of interest rectangle. OCR only reads horizontal text.

The standard language included with the installation is English. If you need the OCR to operate for a different language, please download the language files from [www.informatik.com](http://www.informatik.com), Informatik Scan product page. Unzip the file and place the individual files in the tessdata folder (subfolder of this program's folder). Only the files for one (1) language must be in that folder, so you need to remove the previously installed language files. If you need to use more than one language, install separate instances of the program.

The text must be fairly clean and straight for OCR to read it correctly.

It is highly recommended, when using OCR, that you set the 'Text Pattern'. See Text Pattern section below.

## Text Pattern

If a text pattern is specified, then the text of the barcode or OCR will be compared to the pattern. If the text does not match the pattern, a prompt will be given where you can enter the correct text.

The following placeholder characters can be used:

- ? Any single character, letter, number or symbol
- # Any single digit (0-9)
- \* Zero, one or more characters

Examples:

###?##?#### for exact '123-12-1234' format

EX#####\* for string starting with 'EX', then 6 numbers, then any other characters.

## Prompt if...

You can set the system so that it will prompt you for a file name if the barcode is a specific text. For example, if you set the 'Prompt if...' field to 'INPUT' the scanning halts when the barcode is 'INPUT' and lets you enter the file name.

## Special Options

The version includes options for auto-incrementing file names and serialization. Some of the options are ignored, some may need to be turned off. Here is a short description of the options.

### A. Increment the file base name after each '..NEW' page separator:

A generic barcode separator sheet is included in the Informatik Scan 12, printable from the file menu. Insert the barcode sheet where you want the filename (ending with a number, for example \xyz12345.tif) to increment by one unit. Do not place a barcode sheet as the first page; the system will prompt you to enter the initial file name.

### B. Serialized output files, one file per page

Insert barcode pages with barcodes that specify the file's base name. The first page of the batch must be a barcode page. In the File Name field of the Informatik Scan window add a placeholder in the [+nnn] format (exact spelling), where the n stands for a number, for example xyz[+0001].tif, or xyz.[+001]. The number can have any number of digits. The number represents the start number

of the serialization. Each time the scanner reads a barcode sheet, the start number is reset. For example, if the File Name field shows 'INVOICE\_\*\_[+001].tif' and the barcode reads SMITH, the first page will be saved under the name INVOICE\_SMITH\_0001.tif and subsequent pages are incremented by one unit until a new barcode sheet is read. The process works as follows: First the system replaces the asterisk with the text of the barcode, then it replaces the [+nnn] placeholder with the incrementing number.

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