Softek Software Ltd

# BardecodeFiler

## Product Documentation

V1.7.1

# Contents

# 1 Overview

BardecodeFiler is an application that splits and renames TIF and PDF documents according to the barcode values found in the images.
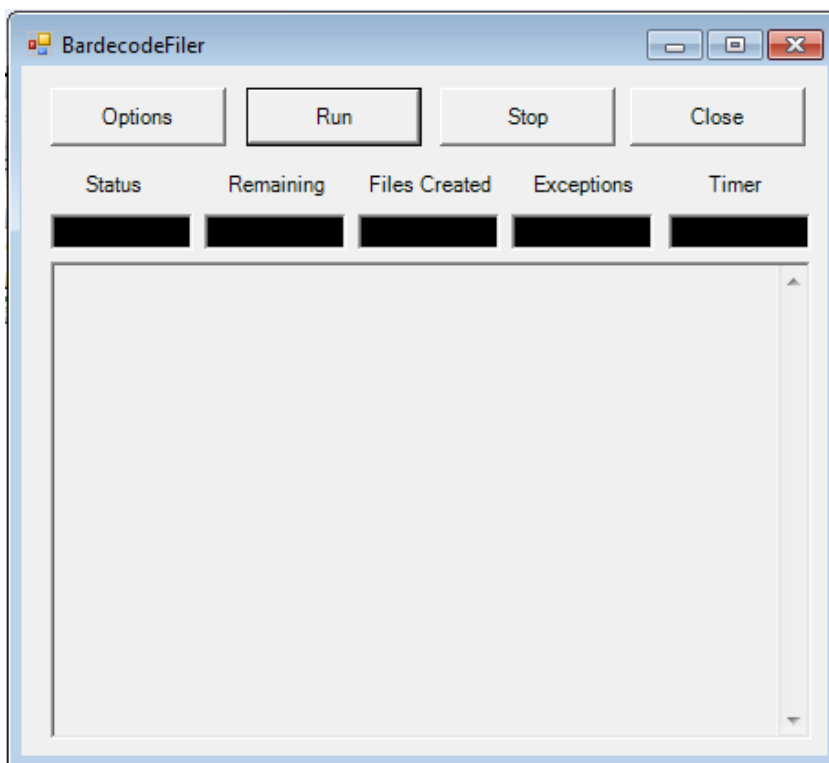
The application reads documents from an input folder and creates new documents in an output folder. The original documents are left intact by default, but there are options to move them to a different folder or delete them. The name of a new document is controlled by a template, which can include the original file name, barcode values and sequence numbers. Documents can either be left whole or split in sub-files according to barcode location.

The barcodes can either be used as separators (where the presense of a barcode indicates either the start or end of a document) or a change in barcode value can be used to indicate a new document.

The application can also be run from the command line – see section 5.

# 2 Main Window

The main window for the application is shown below:



- **Options** - Click on the Options button to display the application settings.
- **Run** - Click on Run to start processing files.
- **Pause/Continue** - Click on Pause to suspend the processing of documents and click on Continue to restart the processing of documents.
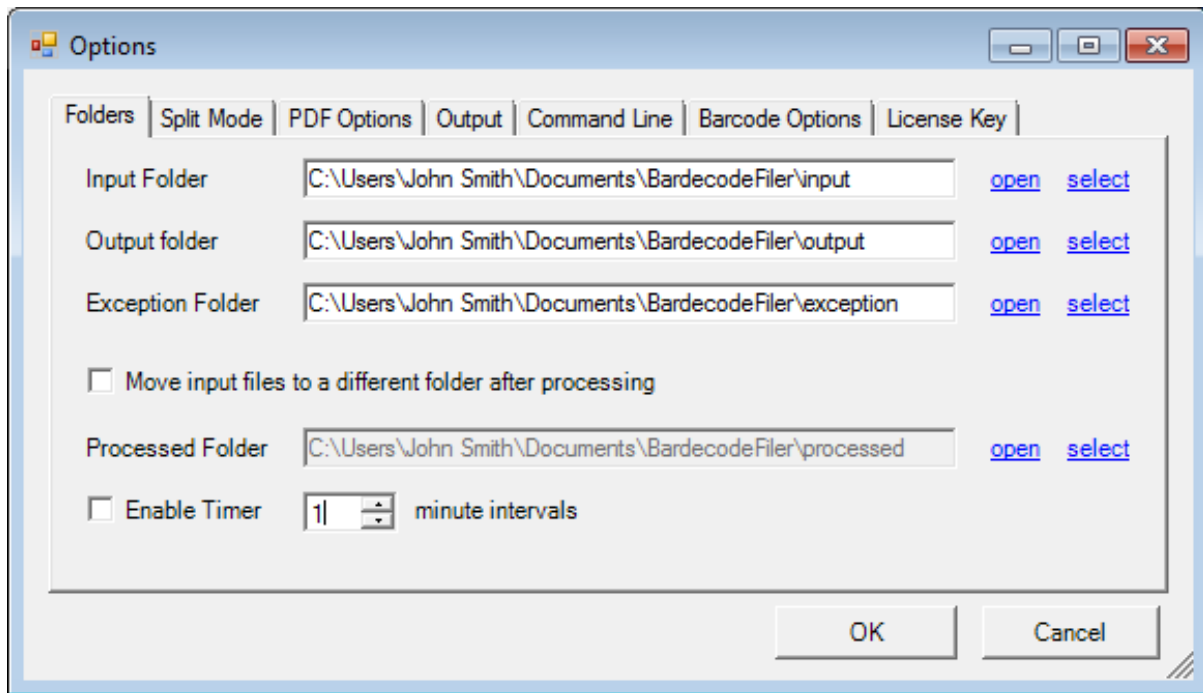
- **Stop** - Click on Stop to cancel the processing of documents.
- **Status Display** - Status - shows whether the application is Idle, Running, Paused or Stopped.
- **Remaining** - displays the number of documents to be processed in the input folder.
- **Files Created** - displays the number of files created in the output folder.
- **Exceptions** - displays the number of files containing no barcode or copied to the exception folder for some other reason.
- **Timer** – number of seconds remaining before the next Run (see section 3.1 for more details on enabling the timer).

The box underneath the status display is used to output messages such as the name of the document currently being processed and the values of the barcodes.

# 3 Options

The options screen is divided into several tabs.
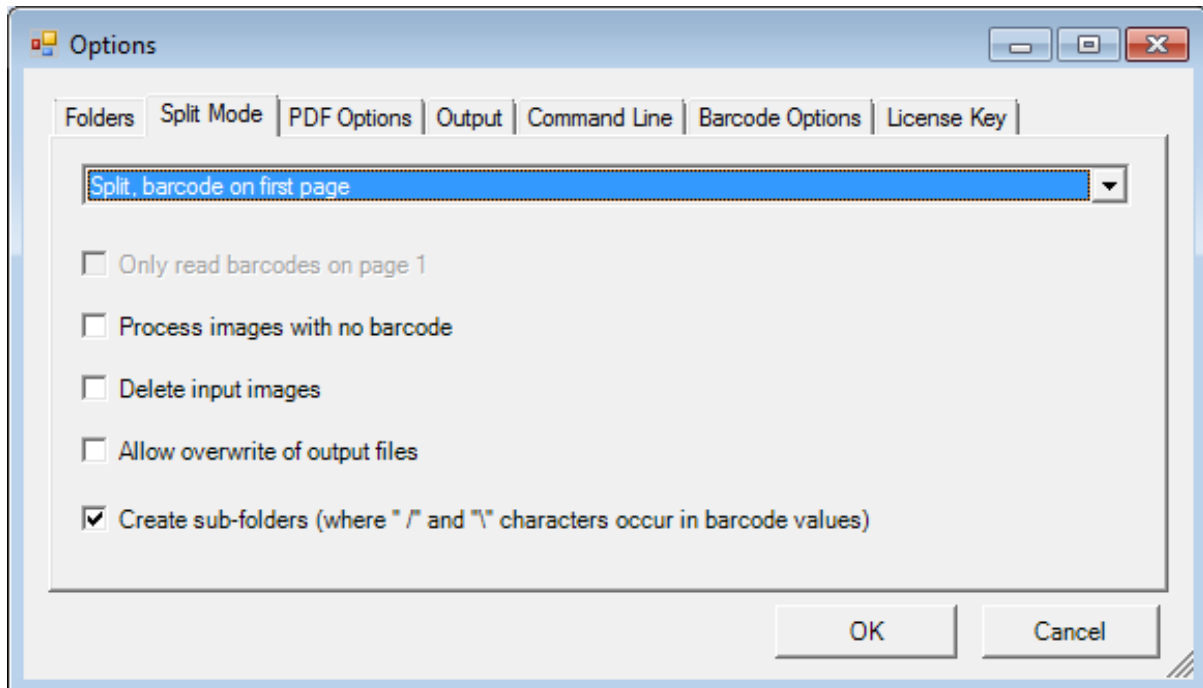
## 3.1 Folders



- **Input Folder** - the folder from which the application should read TIF/JPG/PDF documents.
- **Output Folder** - the folder that the application should use for creating new TIF/JPG/PDF documents. Note that this should be different to the Input Folder.
- **Exception Folder** - the folder where the application should copy documents that contain no barcode.
- **Processed Folder** - if the input files need to be moved to a different folder after processing, tick the check-box and select the appropriate folder.
- **Enable Timer** – automatically process the input folder at the specified interval.

Click on the "open" links to browse the contents of the folders.

Click on the "select" links to change the location of the folders.

## 3.2 Split Mode



The application can either create complete copies of input documents in the output folder, or it can use barcodes as page separators and split the input documents into sub-files. The full list of options is as follows:

- Don't split files – just rename each input file according to the specified template. If you only want to use barcode values from page 1 then check the box labeled "Only read barcodes on page 1". This will increase the speed when processing multi-page images.
- Split - barcodes on first page of the output files.
- Split - barcodes on last page of the output files.
- Split - don't include barcodes – only output pages between barcodes.
- Split - only output barcodes – only output pages containing barcodes.
- JPG - only process JPG files from the input folder. Files are processed in alphabetic order and the output template name is automatically set to %VALUES_%PAGE. An input file that contains a barcode is copied to the output folder as page 1 using the barcode value found in the file. If the next file contains no barcode then it is copied to the output folder as page 2 using the same barcode value. The process is repeated until a file is found to contain a barcode value, in which case it is used as page 1 and the process repeats.
- Split on different barcode value – only split a document when a new barcode value is found. In this mode all the pages belonging to the same document will have the same barcode value. Pages with no barcode are assumed to belong to the same document as the previous page that did contain a barcode. Pages belonging to the same document must appear consecutively in the input file.
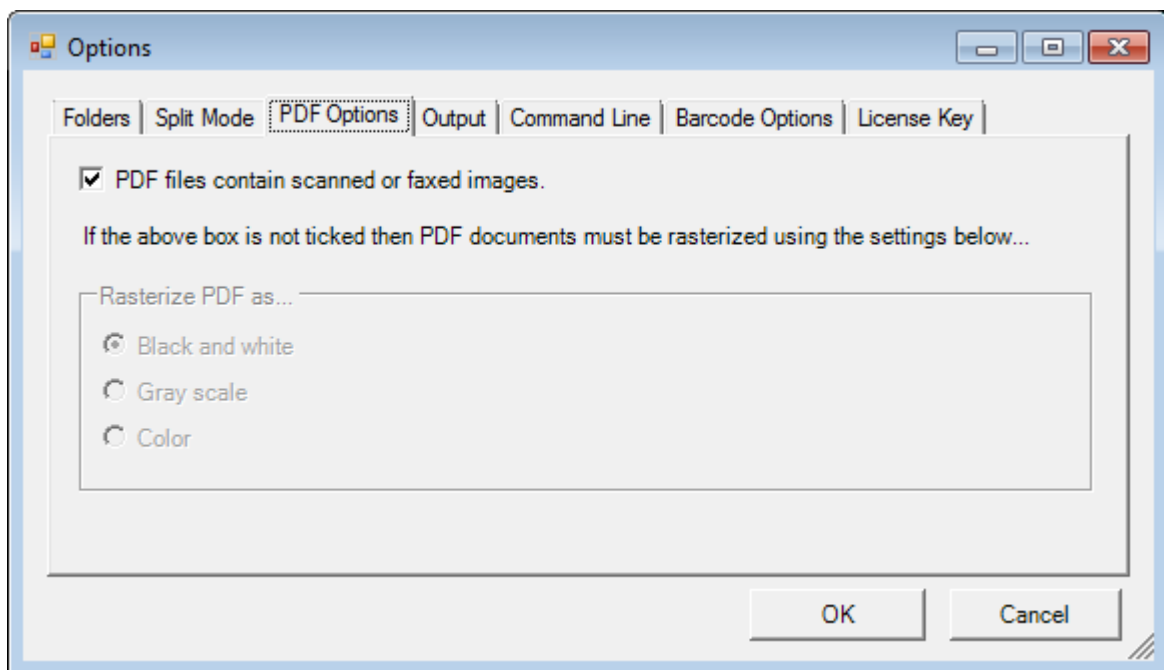
It may be useful to process images containing no barcode into the output folder rather than the exception folder. If this is the case then tick the check box "Process images containing no barcode". If the output template includes %VALUES then it will be replaced by the text "NOBARCODE".

Check "Delete input images" to delete images from the input folder as they are processed.

Check "Allow overwrite of output files" if it is preferable for a file in the output folder to be overwritten. Note that this has no effect if a sequence number has been used in the file name template.
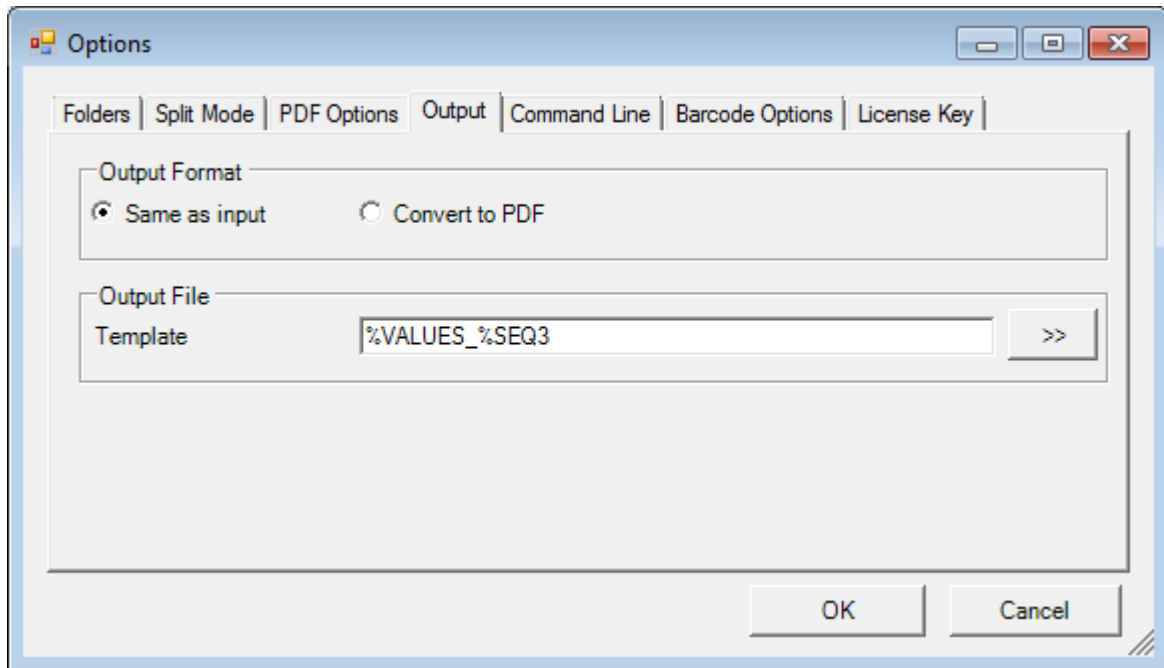
Check "Create sub-folders" if it is preferable for the application to use values that contain "/" and "\" characters as paths and to create sub-folders under the output folder. See section 4 for more details.

## 3.3 PDF Options



By default PDF documents are assumed to be scanned (or faxed) documents. This allows PDF files to be processed at higher speeds but may not be appropriate for all types of document (e.g. a PDF file created in MS Word). Should this be the case then un-tick the check-box, PDF files will then be rasterized into an image in one of the color formats shown.
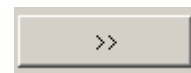
## 3.4 Output



**Output format**

BardecodeFiler can either output files in the same format as the source files or it can convert all files to PDF.
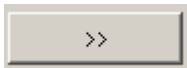
**Output file template**

The output file template controls the way in which new file names are allocated. The template can contain any valid file name characters, with the following keywords being replaced as follows:
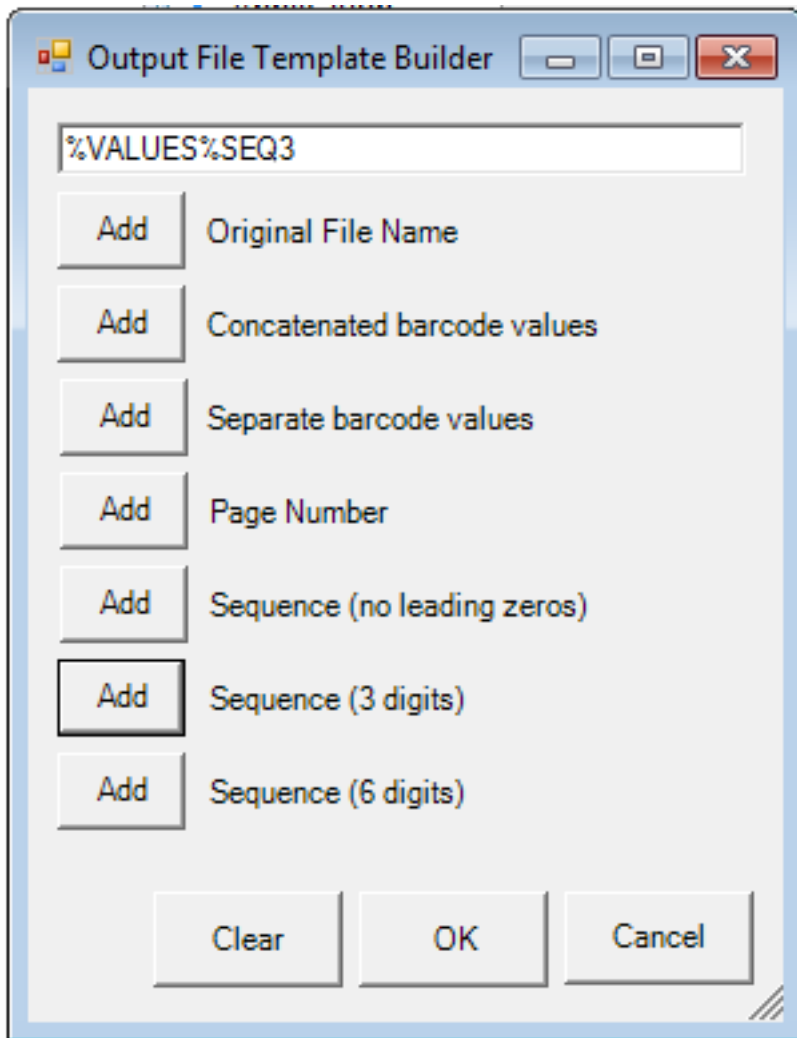
- %ORIG is replaced by the name of the corresponding input file.
- %VALUES is replaced by the barcode values found in the input file that are relevant to the output file. The barcode values are concatenated together with "_" characters between values.
- %VALUE is similar to %VALUES except that one copy of the output file is generated for each barcode value.
- %PAGE is replaced by the separator page number in the input file.
- %SEQ1 is replaced by a number (with no leading zeros) that ensures the new file has a unique file name.
- %SEQ3 is replaced by a 3 digit number that ensures the new file has a unique file name.
- %SEQ6 is replaced by a 6 digit number that ensures the new file has a unique file name.

Note that a "/" or "\" character in the template or in the value of a barcode will lead to the creation of a sub-folder under the output folder. See section 4 for more details.

To open a tool to help build the output file template please click on the button to the right of the field, as shown below:

>>

This opens up the following window:

## Output File Template Builder

%VALUES%SEQ3

| Add | Original File Name |
| Add | Concatenated barcode values |
| Add | Separate barcode values |
| Add | Page Number |
| Add | Sequence (no leading zeros) |
| Add | Sequence (3 digits) |
| Add | Sequence (6 digits) |

Clear     OK     Cancel
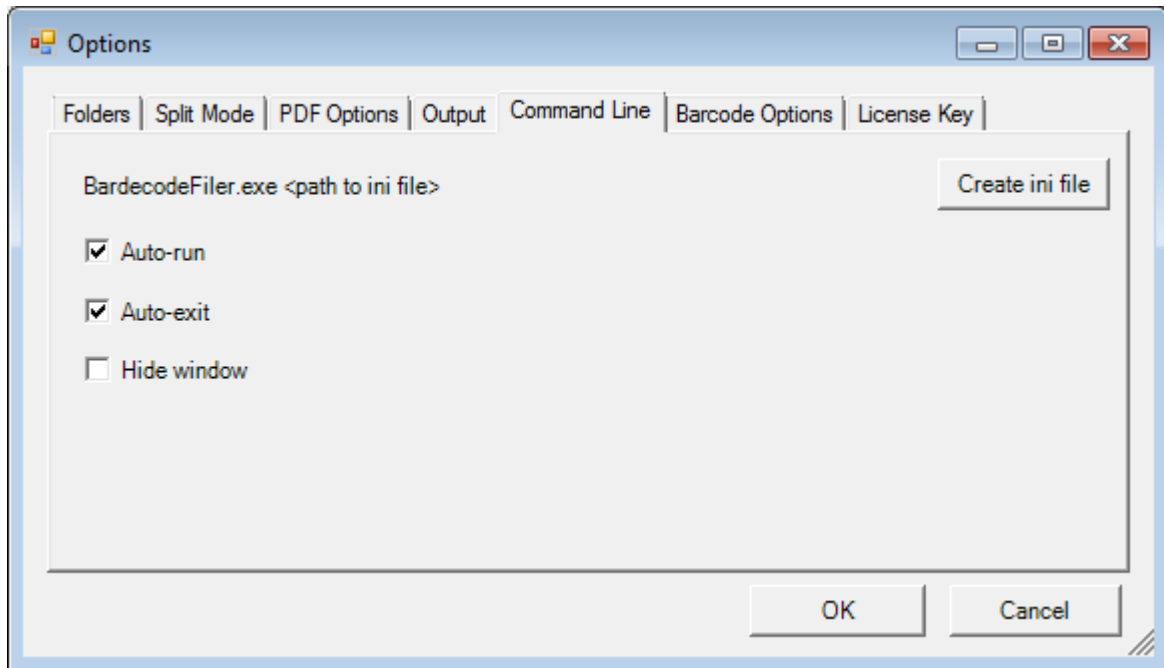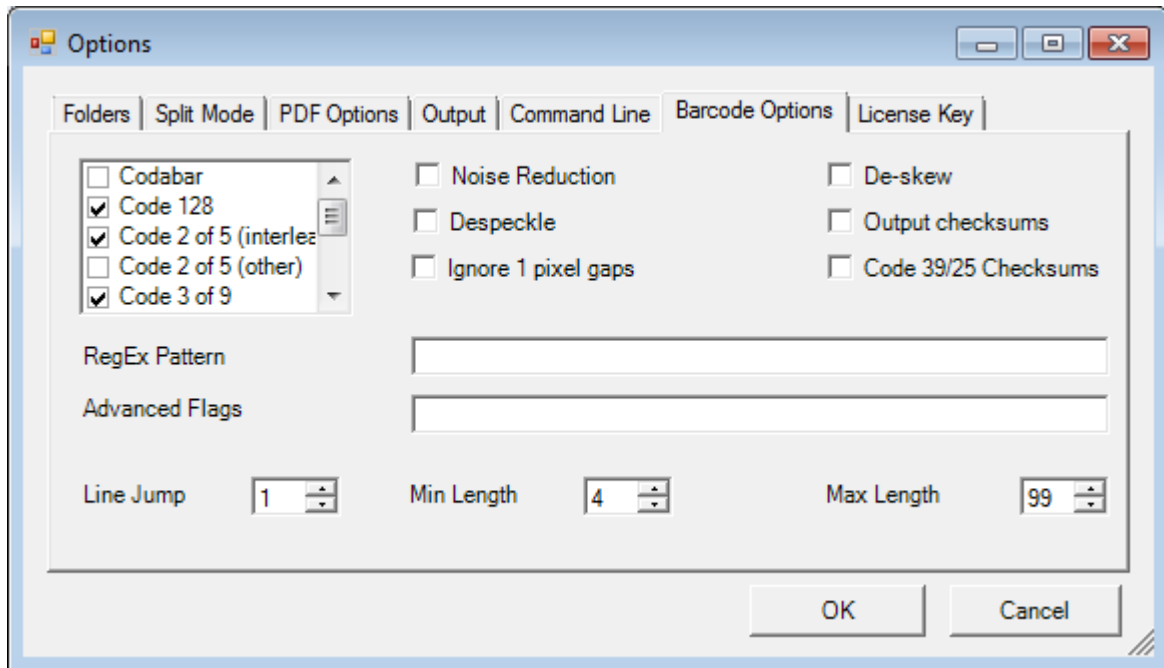
The File Template Builder displays the current value for the template at the top of the window. Use the "Add" buttons to append the appropriate keywords to the template and click OK or Cancel to exit.

## 3.5 Command Line - Auto-Run Options



Please refer to section 5 for more details.

## 3.6 Barcode Types



The application can search for barcodes of type Codabar, Code 128, Code 2 of 5, Code 3 of 9, PDF-417, DataMatrix, EAN-13, UPC-A, EAN-8 and UPC-E.

RegEx Pattern - The RegExPattern field specifies a regular expression that the application should use when searching for barcode. Any barcode that doesn't match the regular expression will be ignored.

**Examples:**

ABC[0-9]+ will match any barcode containing the string ABC followed by 1 or more digits.

^ABC[0-9]+$ will match any barcode that starts with tyhe string ABC followed only by 1 or more digits.

For further information on regular expressions please refer to http://www.regular-expressions.info/

**Other Barcode Reading Settings:**

- **Min Length** is the smallest length of barcode to be recognized.
- **Max Length** is the largest length of barcode to be recognized.
- **LineJump** is the frequency at which scan lines in an image are sampled. Higher values are faster.
- **Noise Reduction** should be ticked if the images contains small black marks in the spaces between bars.
- **Despeckle** should be ticked if the images also contains small white marks in the black bars.
- **Ignore 1 Pixel Gaps** should be ticked if the images contains tiny white marks in the black bars but no black marks in the spaces.

- **De-Skew** should be ticked if the images contain skewed barcodes. Note that this slows down recognition of the barcodes.
- **Output Checksums** should be ticked if the checksum characters from barcodes need to be included in the barcode values.
- **Code 39/Code 25 Checksums** should be ticked if the Code 3 of 9 and Code 2 of 5 barcodes are using checksum characters.
- **Advanced Flags** give access to the underlying options in the barcode reading engine and should be set on advice by BardecodeFiler support.

## 3.7 License Key

It's possible to prevent pop-up boxes from appearing in the evaluation version by requesting a Trial Version Key from [sales@bardecode.com](mailto:sales@bardecode.com). The supplied key normally lasts for 30 days.

## 4. Dynamic Folder Creation

It's possible to use BardecodeFiler to dynamically create folders under the output folder according to data found in either the barcode values or the output template.

For example, a barcode value of "A/B/C/D/EFGHI" in a PDF document, with a template of "MY FOLDER/%VALUES" will result in a file called EFGHI.PDF in the folder "MY FOLDER/A/B/C/D" which (if necessary) will be created under the output folder.

## 5. Running BardecodeFiler from the Command Line

The BardecodeFiler application can also be called from the command line and within scripts. There are options to auto-start, auto-exit and to hide the application while it runs.

To work in this mode the application needs to be called as follows:

BardecodeFiler.exe <path to ini file>

Where the ini file is created by clicking on the "Create ini file" button.

e.g.

BardecodeFiler.exe c:\files\bardecodefiler.ini

The following options apply:

- **Auto-Run** -  automatically process files from the input folder.
- **Auto-Exit**  - automatically exit after processing the input folder.
- **Hide window** – minimize application and remove from task bar whilst processing files.

Note that if Hide window is checked then Auto-Run and Auto-Exit will both be checked, and conversely, if either Auto-Run or Auto-Exit is un-checked then Hide window will also be un-checked.

# 6 Purchase Information

The BardecodeFiler application starts at US$249 for one copy and can be purchased from the following URL:

https://www.componentsource.com/estek/products/bardecodefiler/complete.html

# 6 Release Notes

## Version 1.7.1

Added support for QR-Code.

Added timer option for automatic processing of the input folder

Supports Dynamic Folder creation (see section 4 for more details)

Fixed problem where some settings only came into effect after a restart.

Added SEQ1 template option that adds a sequence number with no leading zeros.

Creates results.csv file in the output folder. This file holds the barcode values from the input files.

## Version 1.6.1

The options screen has been re-arranged using tabs and the input, output and exception folder boxes have been moved onto the first tab from the main window. A new "Processed" folder has been added, with an option to move the input files into this folder once they have been processed. Another option to allow the over-write of output files has also been added.

Changes to the components used to load images into memory mean that TIF and JPG documents process faster. PDF files created by scanning or faxing will also process faster if the new option "PDF files contain scanned or faxed images" is ticked in the PDF Options tab.

A new split mode has been added, "Split on different barcode value ", which only splits a documents when a new barcode value is found.

A problem whereby the application slowed down as sequence numbers increased has been fixed.

Added %VALUE template option.

## Version 1.5.3

Improved exception handling.

## Version 1.5.2

Added Advanced Flags option.

## Version 1.5.1

Added support for processing jpg files (see section 3.1 for more detail).

Enhanced output saved to log file.

Replaced "split-mode" radio buttons in options with drop down list box.

## Version 1.4.4

Removed reliance on Visual C++ redistributable package, which also means that the application will now work on x64 systems.

Added option to only process barcodes on page 1 of input file.

Added the full stop character to the list of acceptable characters for the output file name.

### Version 1.4.2

Changed auto-run to also use one argument – the path to an ini file, which can be created by clicking on the "Create ini file" button.

Added option to only split out pages containing a barcode.

### Version 1.3.2

Corrected error in the creation of the output file path, which resulted in two "." characters before the file extension.

### Version 1.3.1

Added color depth options for PDF output.

### Version 1.3

This version is capable of handling TIF and PDF files, and can also output in either the original format, or convert to PDF.

Changed buttons for selecting input, output and exception folders to links and added links to allow the user to browse the contents of the folders.

Added "Output Format" section in the Options dialog.

Fixed some logic errors splitting files with no barcode on page 1.

Added option to process files containing no barcode into the output folder.

Added option to delete input files as they are processed.

### Version 1.2.1

Changed behavior when an output file already exists and the template does not include a sequence number. Previous versions would report the error and halt processing where as this version will copy the input file to the exception folder and continue processing.

### Version 1.2

Added ability to auto-run from command line. Options to auto-start, auto-exit and to hide the window when running.

Added Line-Jump option to control speed of execution.

Added field for user to enter a trial license key.

### Version 1.1

First release